## THE IMPACT OF THE FEDERAL ACQUISITION STREAMLINING ACT OF 1994 ON POST-AWARD PROTEST FREQUENCY

**THESIS** 

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#### **THESIS**

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#### **Abstract**

The protest process is a means of ensuring that the Government conducts procurements in accordance with statutory and regulatory procedures. Additionally, protests serve a vital role in assuring full and open competition in the federal acquisition process. Protests can be costly in many aspects, including the direct costs of taking the action as well as more indirect costs such as program delays and damaged business relationships. The Government recognizes the negative impact protests have on the procurement process and has enacted several laws and regulations in an effort to reduce protest frequency and streamline procurement procedures. While it appears that the Government has made substantial efforts aimed at reducing protests, it becomes necessary to ask whether they were successful in their efforts. This study examined one such piece of legislation, the Federal Acquisition Streamlining Act of 1994 (FASA), and found that there was an impact on particular contracting practices. Additionally, the findings of this study indicate that protest frequency within the Air Force has decreased since FASA's implementation. This correlation suggests that FASA did have an impact on reducing the frequency of protests.

## THE IMPACT OF THE FEDERAL ACQUISITION STREAMLINING ACT OF 1994 ON POST-AWARD PROTEST FREQUENCY

#### I. Introduction

It is not unusual for contractors who are interested in winning Government contracts to invest a great deal of time and money in preparing a proposal in response to a Government Request for Proposal (RFP). After expending considerable resources preparing their proposals, unsuccessful bidders want to know why they were not awarded the contract. They may feel that the process was unfair, that there must have been a mistake, or they may want to know where their proposals were weak so they may be more competitive in future procurements. Failure to provide answers to unsuccessful bidders' questions regarding the source selection may result in the filing of a protest.

#### **Problem**

Protests can be costly in many aspects. The most obvious costs involve the actual financial resources required to complete the protest process. Protests can be lengthy, and obviously incur greater costs as time passes. Additionally, contract performance may be suspended during protests, preventing timely delivery and satisfaction of Government requirements. When these delays involve major programs, the resultant costs could conceivably amount to millions of dollars. There are also indirect costs of protests, such as the possibility of creating a new precedence, the creation of public relations problems

for the Government, and damage to the relationship between the protesting contractor and the Government. All of these costs may adversely impact the level of competition in Government procurements, either directly or indirectly.

The Government recognizes the negative impact protests have on the procurement process. Consequently, the Government has enacted several laws and regulations in an effort to reduce the number of protests while maintaining the integrity of the procurement system. Some of the more significant laws include the Competition in Contracting Act of 1984 (CICA), the Federal Acquisition Streamlining Act of 1994 (FASA), and the Federal Acquisition Reform Act of 1996 (FARA). Each of these acts have either added, removed, or modified pre-existing acquisition policies and regulations, and each has had differing effects on the frequency of bid protests.

The intent of CICA was to "increase competition in the award of Government contracts" and to "eliminate the imbalances in the protest system," [Walsh, June 1987: 53]. Previous research on the impact of CICA on the number of protests indicated that there was a 10-15% increase in protests in the years following CICA's enactment [Walsh, June 1987: 130].

The Federal Acquisition Streamlining Act made significant changes in the following areas of acquisition: task and delivery order contracting, advisory and assistance services contracting, source selection procedures and debriefings, bid protest procedures, contractor past performance and other evaluation factors, new micro purchase procedures, commercial item procurement, small business awards, and several other areas. While President Clinton proclaimed FASA as the most significant piece of

procurement reform legislation since the passage of CICA in 1984, many others have criticized FASA for not going far enough [Acquisition Streamlining Institute, 1997, p. 13]. Some critics maintain that more should have been done in other areas, such as those aimed at reducing the frequency of bid protests.

The changes imposed by FARA can be seen as further adjustments that complement the reforms made by FASA. These three acts are among the more significant efforts of the United States Government to reform acquisition and reduce post-award protests. While it appears that the Government has made substantial efforts aimed at reducing protests, it becomes necessary to ask whether they were successful in their efforts. FARA just went into effect on 1 January 1997, so it would be premature to study its effects due to lack of data. FASA on the other hand has been in effect for over two years at the time of this writing and sufficient data should be available to conduct a preliminary analysis of any effects it may have had on protest frequency.

#### **Objective**

The objective of this research is to examine the impact of The Federal Acquisition Streamlining Act of 1994 on post-award protest frequency within the Air Force. In examining this topic, the following primary research question was developed:

Primary: Has The Federal Acquisition Streamlining Act of 1994 impacted post-award protest frequency within the Air Force, and if so, how?

In order to address the primary research question posed in this research, it is necessary to formulate subsidiary research questions. The results of the subsidiary questions will be used to answer the primary question.

#### Subsidiary:

- 1) Has FASA impacted the United States Air Force's source selection processes in a manner that would significantly affect post-award protest frequency?
- 2) Has FASA impacted post-award protest frequency within the United States Air Force?

#### Organization of the Study

To accomplish the goals of this study, it was first necessary to develop an understanding of the protest process and how protest frequency could be influenced by events occurring during the source selection. Chapter II provides this background and also briefly discusses relevant existing statutes and the evolution of Acquisition Reform within the Federal Government. The Literature Review conducted for chapter II revealed that certain provisions of recent acquisition legislation were conducive to reducing bid protests while others might actually incite increases in the same.

Chapter III details the study methodology. It provides support for the appropriateness of a case study methodology and statistical analysis of archival protest data to accomplish the goals of this study. Additionally, chapter III discusses the details on the structured interview that was employed and provides the guidelines that were used in deducing meaning from the responses.

Chapter IV summarizes and analyzes the interview responses and results from the statistical tests. Chapter V is the final chapter and discusses the conclusions made from the data collected. The conclusions drawn from this research indicate that particular practices such as the content and administration of post-award debriefs has been changed

as a result of FASA's implementation. As a consequence of these changes, the number of protests have decreased. Surprisingly however, the increase in openness and more thorough debriefs have apparently not influenced any changes in the quality of proposals submitted by potential contractors. The study concludes with recommendations for future research.

#### II. Background

#### Introduction

There are currently two methods available to the Federal Government for the competitive procurement of goods and services: sealed bidding and competitive proposals (negotiated procurement). In determining which method to use, "agencies are required to use the competitive procedure or combination of competitive procedures that is best suited under the circumstances of the procurement," (41 USC §253, and 10 USC § 2304). These statutes also state the criteria for using sealed bidding and requires its use if the following criteria are all present [Cibinic and Nash, 1986: 290]:

- (2) In determining the competitive procedures appropriate under the circumstances, an executive agency –
- (A) shall solicit sealed bids if—
- (i) time permits the solicitation, submission, and evaluation of sealed bids;
- (ii) the award will be made on the basis of price and other price-related factors;
- (iii) it is not necessary to conduct discussions with the responding sources about their bids: and
- (iv) there is a reasonable expectation of receiving more than one sealed bid; and
- (B) shall request competitive proposals if sealed bids are not appropriate under clause (A).

Under sealed bidding procedures, the contract is awarded to the lowest priced bidder that is responsive to the requirements in the solicitation and is determined to be responsible. Bidders may witness bid openings and inspect the bids and accompanying documents afterwards. Thus, unsuccessful bidders generally know they were not awarded the contract because they were not the lowest bidder.

On the other hand, contract award is often determined by other factors in addition to price under competitive proposal procedures. The specific number and types of evaluation factors depend on the nature of the procurement and procuring officials have broad discretion in these matters. Contract award is not conducted through public bid openings and a lengthy period of negotiations and evaluations may transpire before an award is announced. Since the award may be based on multiple evaluation factors and not just price alone, unsuccessful offerors may not understand why their firm was not selected.

It is not unusual for contractors who are interested in winning Government contracts to invest a great deal of time and money in preparing a proposal in response to a Government Request for Proposal (RFP). They analyze current and/or past contracts, conduct research to fully understand the Government's requirements, and disburse significant resources in developing a solution that represents the most competitive offer possible. Failure to make such investments could lead to a competitive disadvantage in the selection process. After expending considerable resources preparing their proposals, unsuccessful bidders want to know why they were not awarded the contract. They may feel that the process was unfair, that there must have been a mistake, or they may want to know where their proposal was weak so they may be more competitive in future procurements. Failure to provide answers to unsuccessful bidders' questions regarding the source selection may result in the filing of a protest.

#### **Protests Exist**

A protest, as formally defined by the Federal Acquisition Reform Act of 1994, includes "a written objection to a solicitation, cancellation of a solicitation, award or proposed award, and termination or cancellation of an award if improprieties are alleged." The protest process is a means of ensuring that the Government conducts procurements in accordance with statutory and regulatory procedures. Additionally, protests serve a vital role in assuring full and open competition in the federal acquisition process. There are generally two reasons industry contractors file protests: "(1) to gain the contract; or (2) to correct perceived inequities in the evaluation," [Cooper, 1995: 5]. There is little the Government can do to minimize protests filed for the first reason without running a risk of making federal contracts less attractive and adversely affecting competition. For example, the Government could reduce these type of protests by making it more difficult or less attractive to file protests. However, this could make Government contracts less appealing and discourage some potential bidders from competing. On the other hand, the Government can impact the number of protests filed to correct perceived inequities in evaluations. The fact that these are perceived to be inequities can be removed or prevented through an increase in information flow between parties. This could be potentially accomplished through more thorough and timely debriefings provided to unsuccessful offerors, and identifying significant evaluation factors and their relative importance in all solicitations.

Disappointed bidders desiring to lodge a protest have many forums in which to choose from: the awarding agency itself, the Court of Federal Claims, U.S. District

Court, and the General Accounting Office (GAO) [Fausti and Lee, 1997: 10]. The availability of a particular forum to hear and decide a protest is determined by a number of factors such as the agency involved, the nature of the protester, and the time of the protest [Cibinic and Nash, 1986: 1009]. "Where multiple forums are available, the protestor faces a tactical choice based upon such factors as the nature of relief desired, the formality of procedures, the standards of review, and the likelihood of obtaining substantial relief," [Cibinic and Nash, 1986: 1009].

This chapter will discuss the costs of these protests to both the contractor and the Government, and what the Government has done to reduce protests.

#### **Costs Of Protests**

Protests can be costly in many aspects. The most obvious costs involve the actual financial resources required to complete the protest process. Attorney fees, administrative costs, witness fees, and filing fees are just a few of the types of direct costs that may be incurred by both parties during protests. Protests can be lengthy, and obviously incur greater costs as time passes. In fact under current rules, the GAO can take up to 100 calendar days after the filing of the protest to render a decision [Fausti and Lee, 1997: 11]. Additionally, contract performance may be suspended during protests, preventing timely delivery and satisfaction of Government requirements. When these delays involve major programs, the resultant costs could conceivably amount to millions of dollars.

In addition to the direct costs, there are also indirect costs of protests which may not be as obvious, but are just as significant. In the course of a protest, there is the possibility of the board or courts requiring a new interpretation of the law in reaching their decision, resulting in new precedence. The creation of new precedence is not always harmful, however it can potentially alter and complicate the procurement process. Protests can also create public relations problems for the Government. Other contractors may adopt the impression that dealing with the Government is not worth the hassle or that the Government is not fair in their dealings. This is in addition to any harm that may come to the relationship between the protesting contractor and the Government.

Additionally, other bidders in the procurement may spend significant amounts maintaining "proposal teams" or keeping open capacity in their firms during a protest in the event that it results in a resolicitation. All of these costs may adversely impact the level of competition in Government procurements, either directly or indirectly.

The Government recognizes the negative impact protests have on the procurement process. Consequently, the Government has enacted several laws and regulations in an effort to reduce the number of protests while maintaining the integrity of the procurement system. Some of the more significant laws include the Competition in Contracting Act of 1984 (CICA), the Federal Acquisition Streamlining Act of 1994 (FASA), and the Federal Acquisition Reform Act of 1996 (FARA). Each of these acts have either added, removed, or modified pre-existing acquisition policies and regulations, and each has had differing effects on the frequency of bid protests. We will next discuss each of the acts and the relevant provisions that have, or are expected to, impact bid protest frequency.

#### **Competition In Contracting Act**

The Competition in Contracting Act of 1984 modified existing Federal procurement statutes and the GAO bid protest system. The intent of CICA was to "increase competition in the award of Government contracts" and to "eliminate the imbalances in the protest system," [Walsh, June 1987: 53]. Some of the major changes resulting from CICA are as follows [Walsh, June 1987: 54-55]:

- eliminated preference for formal advertising and put competitive negotiation on the same level as sealed bid procedures.
- eliminated the seventeen exceptions to formal advertising and established seven exceptions under which "other than competitive procedures" may be used.
- required sealed bid procedures when four specific conditions are met, otherwise competitive proposals are to be used.

Additionally, CICA formally empowered the Comptroller General (GAO) to hear protests and to reformat the award protest system by [Walsh, June 1987: 55]:

- directing the GAO to issue and publicize bid protest procedures;
- setting mandatory time limits for decisions on the merits of the protests:
- making protest injunctions virtually automatic; this stay of award prohibits contract award after the contracting officer has received notice of a protest to the Comptroller General and while the protest is pending. Additionally, CICA mandates that contract performance be ceased or the contract suspended for post-award protests filed within 10 days of contract award. However, the head of the responsible procurement activity can notify the Comptroller General and authorize performance based on a written finding that contract performance will be in the Government's best interest and that the urgent and compelling interests of the United States will not permit awaiting the decision of the Comptroller General.
- directing GAO to disregard intervening cost and performance factors in cases where the agency head overrides the suspension and allows contract performance to continue while the protest is pending; and,
- granting power to the GAO to recommend any of several actions, including monetary award to protesters to cover bid protest and bid and proposal costs.

The intent of Congress in creating CICA was to enhance competition in Government procurements, ironically however they may have indirectly invited additional protests. Requiring the GAO to advertise its new bid protest process and offering automatic stays and terminations could have led potential protestors to believe that there was a more lenient basis for protests. Previous research on the impact of CICA on the number of protests indicated that there was a 10-15% increase in protests in the years following CICA's enactment [Walsh, June 1987: 130].

CICA was effective in certain aspects of increasing competition in Government procurement. However, the undesired effect of increasing protests was unacceptable. Further studies, laws and regulations were enacted in an attempt to counter the negative effects of CICA and streamline the acquisition process. One such act, the National Defense Authorization Act of 1991, directed the Department of Defense to establish an advisory panel of experts to review all laws affecting procurement. This panel became known as the Section 800 panel and recommended changes in over 600 statutes affecting Government procurement and defense acquisition. These recommendations became the basis for the changes included in the Federal Acquisition Streamlining Act of 1994 [Cooper, June 1995: 14]. The next section discusses the implementation of the Federal Acquisition Streamlining Act and identifies some of its significant provisions as they pertain to bid protests.

#### The Federal Acquisition Streamlining Act

The Federal Acquisition Streamlining Act was signed into effect on October 13, 1994 and made significant changes to the acquisition process by eliminating or modifying

over 225 existing statutes. The act made significant changes in the following areas of acquisition: task and delivery order contracting, advisory and assistance services contracting, source selection procedures and debriefings, bid protest procedures, contractor past performance and other evaluation factors, new micro purchase procedures, commercial item procurement, small business awards, and several other areas. The themes behind the changes made by FASA are a preference for moving to commercial contracting methods, transitioning the procurement process to an electronic basis, eliminating paperwork burdens in the procurement cycle, and eliminating non-value added requirements. The following is a summary of the major changes enacted by FASA [Kidd, 1996: 26-30], [the Federal Acquisition Streamlining Act of 1994]:

- Allows the use of a credit card method for "micro purchases (procurements up to \$2,500)" with virtually no paperwork or oversight required for each individual purchase.
- Simplified acquisition threshold (procurements from \$2,500 to \$50,000 and, after FACNET certification to \$100,000) which reduces paperwork and moves DOD to electronic procurement procedures.
- Allows the use of contractor's past performance as a major evaluation factor in the source selection process.
- Requires agencies to limit the number of proposals in the competitive range to provide for efficient competition among the highest rated competitors.

Another area addressed by FASA is the debriefing process. Under FASA, agencies are now required to provide a debriefing to any interested offeror as to why they were excluded from the competitive range or from further consideration, provided the offeror submits a written request for debriefing within three days of learning of their exclusion [Acquisition Streamlining Institute,1997: 32]. There are a number of reasons supporting the need for briefing unsuccessful offerors. Considerations of fairness dictate

such communication in response to the effort that an offeror has put into preparing and submitting the proposal [Cibinic and Nash, 1986: 655]. It may also be beneficial to the Government to thoroughly inform the offeror of their proposal's deficiencies so that the same mistakes are not repeated in subsequent proposals. By avoiding the same mistakes and improving their proposals, contractors become more capable of responding to the Government's requirements in future procurements. Consequently, competition is enhanced, allowing the Government to not only have its needs more effectively satisfied, but often at a better price. Providing useful debriefing information can ultimately reduce the cost of the competitive process and increase the likelihood that offerors will continue to view the Government market as a worthwhile place to invest its resources as well.

"For many years, contractors have complained that debriefings were not serving their intended purpose," [Acquisition Streamlining Institute,1997: 24]. "To be effective in their intended purpose, debriefings should inform the offeror why it was not awarded the contract in order to improve subsequent proposals, thereby furthering full and open competition," [Acquisition Streamlining Institute,1997: 24]. However, a lack of guidance coupled with a fear of revealing proprietary or source selection information resulted in Government personnel being reluctant to divulge significant information about the procurement. Consequently, companies were limited in their options for discovering the basis of an award decision and often resorted to filing bid protests [Acquisition Streamlining Institute,1997: 24]. In an effort to break such a cycle and help "create a government that works better and costs less," Congress included the following sections in

FASA, pertaining to post-award debriefs protests [Acquisition Streamlining Institute,1997: 33]:

- When a contract is awarded by the head of an agency on the basis of competitive proposals, an unsuccessful offeror, upon written request received by the agency within 3 days after the date on which the unsuccessful offeror receives the notification of the contract award, shall be debriefed and furnished the basis for the selection decision and contract award. The head of the agency shall debrief the offeror within, to the maximum extent practicable, five days after receipt of the request by the agency.
- The debriefing shall include, at a minimum-
  - the agency's evaluation of the significant weak or deficient factors on the offeror's offer;
  - the overall evaluated cost and technical rating of the offer of the contractor awarded the contract and the overall evaluated cost and technical rating of the offer of the debriefed offeror;
  - the overall ranking of all offers;
  - a summary of the rationale for the award;
  - in the case of a proposal that includes a commercial item that is an end item under the contract, the make and model of the item being provided in accordance with the offer of the contractor awarded the contract; and
  - reasonable responses to relevant questions posed by the debriefed offeror as to whether source selection procedures set forth in the solicitation, applicable regulations, and other applicable authorities were followed by the agency.
- The debriefing may not include point -by-point comparisons of the debriefed offeror's offer with other offers and may not disclose any information that is exempt from disclosure.

"The scope of the information that FASA mandates agencies provide in debriefs is rather broad and intended to reveal sufficient details about the competition to permit an offeror to understand the rationale for the agency's award decision," [Acquisition Streamlining Institute,1997: 24]. The importance of thorough debriefings was emphasized during a past report of the Senate Committee on Governmental Affairs [Senate Report No. 103-258, 103<sup>rd</sup> Congress, 2<sup>nd</sup> session 7, 1994]:

The inability to obtain sufficient information in debriefing, in particular a meaningful explanation of the basis for the award decision, leads many firms to file protests in order to obtain that information.

The primary purpose of mandating meaningful debriefings as part of the acquisition streamlining effort is to eliminate the filing of protests as a means to discover the propriety of an award decision.

FASA mandates certain minimum information be provided to unsuccessful bidders during debriefs, however Contracting Officers still have the latitude to provide additional information at their discretion, particularly if this supplementary information might prevent a protest. Certain information is still prohibited from release under existing regulations, however. The Freedom of Information Act, which states that it does not authorize the withholding of any information otherwise required to be disclosed by law, and FAR 15.1004(e) still preclude revealing trade secrets, the names of individuals providing reference information about the contractor's past performance, any information which is not relevant to the award process, or other privileged and confidential information [Acquisition Streamlining Institute,1997: 26]. In addressing this issue, Congress stated that agencies should withhold information

relating to trade secrets; privileged or confidential manufacturing processes and techniques; and commercial and financial information that is privileged or confidential, including cost breakdowns, profit, indirect cost rates, and similar information. [Acquisition Streamlining Institute, 1997, p. 26]

In addition to addressing the content of debriefs, FASA also changed the procedures for requesting and responding to requests for debriefs. Prior to FASA's implementation, agencies were required to conduct debriefings "as soon as possible" after contract award. The provisions of FASA now mandates, however that agencies must

notify unsuccessful offerors of an award within three days of the award. Offerors then have the option to request a debrief as long as they do it within three days of receiving the award notification. Agencies are required to respond to requests for debriefs and conduct a debriefing within five days of receiving the request. Agencies may, at their discretion, accommodate late requests for debriefs, however they are not required to do so. This is a departure from past practices where every offeror was entitled to a debriefing regardless of when it was filed.

Another area addressed by FASA that could impact the frequency of bid protests is evaluation criteria. FAR § 15.605, regarding evaluation of proposals in a negotiated procurement was significantly altered by FASA. "The intent of these modifications was to result in solicitations that were more definite in regards to evaluation criteria, and in more awards based on initial proposals," [Acquisition Streamlining Institute, 1997: 19]. Previously, there were occurrences of agencies listing the relative importance of the technical factors in procurements but failing to state how these factors related to price [Acquisition Streamlining Institute, 1997, p. 20]. In such cases, the GAO has held that when an agency does not explicitly state the relative importance of the cost and technical factors "it must be presumed that cost and technical considerations will be considered approximately equal in weight," [Riggins Co., Inc., B-244460, 84-2 CPD ¶ 137]. Subsequent to FASA, agencies must now identify in their solicitations all significant evaluation factors in the source selection and their relative importance. Additionally, the solicitation is required to include whether the non-cost factors are "significantly more important," "approximately equal to," or "significantly less important" than cost.

Contracting Officers may, at their discretion, provide additional details to clarify the relative importance of the factors, however they are not required to do so.

Not all of the provisions of FASA may have the desired effect of reducing bid protests. Some maintain that FASA's increased emphasis on the use of contractors past performance as an evaluation factor could potentially result in an increase in protests [interview, 2 Apr 97]. FASA established the requirement for all Government agencies to collect and maintain information on contract performance and required the Office of Procurement Policy (OFPP) to establish guidance for agencies pertaining to the evaluation of past performance. OFPP amended FAR parts 9,15, and 42 to impose a number of requirements [Acquisition Streamlining Institute, 1997, pp. 21-22]:

- All contractors must have a "satisfactory performance record" (unless it has no record at all), FAR 9.104-1(c);
- Contracting officers must consider past performance when making a determination of a contractor's responsibility, FAR 9.105-1(c);
- Contracting officers are directed to acquire data on contractor past performance from a myriad of sources, both government and nongovernment;
- A new FAR Subpart 42.15, Contractor Performance Information, specifies
  that an agency must retain past performance information, permit contractors to
  submit rebuttal information, and share such information with other agencies
  for a period of not more than three years after completion of contract
  performance.
- Requires that the relationship of past performance and other non-price factors be clearly stated in the solicitation.

Additionally the regulations mandate that past performance be used as an evaluation factor in all competitively negotiated procurements valued over a certain threshold determined by the date of issuance [Acquisition Streamlining Institute, 1997: 22].

In addition to the determination of responsibility, FAR 15.608(a)(2)(i) mandates that the agency evaluate the "number and severity of an offeror's problems, the effectiveness of corrective actions taken, the offeror's overall work record, and the age and relevance of past performance of information." The information considered shall only include Federal, state, and local governments of a similar nature, as well as any other information from known sources [FAR 15.608(a)(2)(ii)]. If past performance information for a particular firm is lacking or unavailable, the firm will receive a "neutral" evaluation in that area [FAR 15.608(a)(2)(iii)]. As mentioned earlier, FASA mandates that agencies disclose certain information at post award debriefs, however, FAR § 15.1004(e)(4) prohibits the release of names of individuals providing reference information about an offeror's past performance. This undisclosed information could contribute to unsuccessful bidders protesting an award decision if they feel that the past performance data is inaccurate or provided by a source with malicious intent [Cooper, 1994: 5]. Additionally, this prohibition could deprive an offeror unfairly criticized from adequately addressing perceived performance shortcomings.

Some contracting officers have offered the recent source selection of the Joint Primary Aircraft Training System (JPATS) to illustrate the point that FASA may actually increase protest frequency. They emphasized that despite abiding by all implemented FASA regulations and guidelines, the JPATS became one of the largest programs to ever be protested [interview, 2 Apr 97]. The \$7-billion program was intended to replace the Air Force's aging T-37B and the Navy's T-34C as training aircraft. When it was announced that Raytheon was the winner of the competition in June 1995, Cessna and

Rockwell filed protests over the Air Force's definition of best value and the use of unannounced criteria in the competition [Fulghum, July 24, 1995: 24]. Both companies complained that they were misled into believing that the competition was for best value, rather than lowest cost. As mentioned previously, FASA does specifically address the inclusion of significant evaluation factors that will be considered in making the source selection and their relative importance. This would seem to contradict statements that this particular source selection fully complied with FASA. However, according to senior Air Force acquisition officials, "the inability of the Air Force to quantify or define best training value led acquisition officials to select the lowest-unit-priced Raytheon Mk.2 as the winner of the competition," [Fulghum, Feb 12, 1996: 60]. The unnamed official went on to say that "Rockwell's aircraft was the most advanced technologically and Cessna's lifecycle cost was actually a little lower, but because no one could actually quantify best training value, the Air Force went with the lowest initial acquisition cost," [Fulghum, Feb 12, 1996: 60]. The GAO reviewed both the selection process and the Government's choice of Raytheon and subsequently rejected Cessna and Rockwell's protests on the grounds that the selection process was not improper [Fulghum, Feb 12, 1996: 60]. This decision implies that the allegations were perhaps unfounded and that the competition was in compliance with applicable provisions of FASA. A finding for the protestors in this instance would have implied that the agency had not complied with FASA, however this was not the case.

The next question is whether the agency's compliance with FASA contributed to the protest. The grounds for the protest and the GAO's decision in this case suggests just

the contrary. In fact, the protestors allegations of unannounced evaluation criteria is specifically addressed by FASA as mentioned previously. Therefor, it does not appear that FASA contributed to this protest, however it is possible that perhaps this area was not adequately addressed in the Act.

#### Implementation of FASA

Implementing FASA was a complex process involving revisions to numerous regulations, principally the Federal Acquisition Regulation (FAR). Revisions were also needed in the Defense Acquisition Regulation Supplement (DFARS), other agencies FAR supplements, and miscellaneous other regulations. Additionally, FASA resulted in the issuance of nonregulatory guidance such as DOD directives and instructions. Although the Act makes sweeping changes in a number of areas, many of these changes had little impact on the contracting process at certain agencies. While President Clinton proclaimed FASA as the most significant piece of procurement reform legislation since the passage of CICA in 1984, many others have criticized FASA for not going far enough [Acquisition Streamlining Institute, 1997, p. 13]. Some critics maintain that more should have been done in other areas, such as those aimed at reducing the frequency of bid protests. In Air Force Material Command (AFMC), the Air Force's largest buying organization, FASA had little impact on the way they do business in certain respects. Some contracting officers and acquisition professionals maintain that FASA had little impact on AFMC's contracting process, particularly as it relates to the areas previously discussed as being critical to protest frequency, including debriefs [interview, 4 Apr 97]. They assert that the practices within their organizations either met or surpassed the

requirements implemented by FASA, or that somehow, particular provisions of the Act were not applicable to their organizations. One interviewee stated that the only FASA-related changes in her organization (ASC) that might have an impact on protest frequency was the addition of past performance as an evaluation factor and the requirement to provide debriefs within three days of their request [interview, 2 Apr 97]. Other than these areas, it appears that FASA had little formal impact on these two organization's contracting processes and may not have a significant impact on the frequency of protests.

#### The Federal Acquisition Reform Act of 1996

One of the most recent attempts at the improvement of the Federal acquisition process is the Federal Acquisition Reform Act (FARA). The changes imposed by FARA should be seen as further adjustments that complement the reforms made by FASA. The final rule, that became effective on January 1, 1997, amended the FAR to require that contracting officers, prior to contract award, provide a debriefing to an interested offeror on the reasons for that offeror's exclusion from the competitive range [Government Contracts Alert, 1997:1]. Pursuant to this new rule, the contracting officer may refuse to provide a pre-award debriefing request if: (1) it is not in the best interests of the Government, at the time the debriefing is requested, to provide such a debriefing (however, the contracting officer must provide the requested debriefing no later than the time at which the agency conducts its post-award debriefings); or, (2) a written request from the offeror for such a debriefing is not received by the contracting officer within three days of the offeror's receipt of a notice of exclusion from the competitive range [Government Contracts Alert, 1997:1].

Under the new rule, pre-award debriefings may be performed orally or in writing, and at a minimum, should include the following information: (1) the agency's evaluation of significant elements in the offeror's proposal; (2) a summary of the rationale for excluding the offeror from the competitive range; and, (3) reasonable responses to relevant questions about whether source selection procedures contained in the solicitation, applicable regulations, and other applicable authorities were followed in the process of excluding the offeror from the competitive range. Pre-award debriefings should not disclose (1) the number of offerors; (2) the identity of the other offerors; (3) the content of the other offerors' proposals; (4) the ranking of the other offerors; (5) the evaluation of the other offerors; or, (6) any of the information prohibited from disclosure during post-award debriefings. Additionally, FARA established civil and criminal penalties for the unauthorized disclosure of contractor bid or proposal information, or source selection information, before the award of the procurement contract to which the information relates.

These three acts are among the more significant efforts of the United States

Government to reform acquisition and reduce post-award protests. Were they successful in their efforts? The following section will discuss the author's propositions for this study in an attempt to provide more insight into their success.

#### **Propositions**

The intent of this research is to discern the effectiveness of Government efforts at reducing post-award protest frequency. As mentioned earlier, CICA made filing protests easier and a previous study indicated that protests actually increased 10-15% over the

following years. FARA just went into effect on 1 January 1997, so it would be premature to study its effects due to lack of data. FASA on the other hand has been in effect for over two years at the time of this writing and sufficient data should be available to conduct a preliminary analysis of any effects it may have had on protest frequency. Known previous research had considered FASA in its analysis of the Army's installation level post-award debriefing process and included recommendations for improvement. At the time of this writing however, there did not appear to be any known research on FASA's effects on the frequency of protests or whether offerors' proposals have improved as a result.

As previously mentioned, there are generally two reasons why industry files protests: (1) to gain the contract; or (2) to correct perceived inequities in the evaluation. By introducing more stringent requirements for the administration and content of postaward debriefs, and mandating the identification of all significant evaluation factors in solicitations, FASA attempted to reduce protests by addressing the second reason. While these measures may appear to be very practical attempts at reducing protests, it is difficult to determine whether they have had their desired effect. Based on the information discussed in this chapter, the author contrived the following propositions to be the focus of this research:

Proposition #1: FASA has not impacted the United States Air Force's source selection processes in a manner that would significantly affect post-award protest frequency. Preliminary unstructured interviews were conducted with contracting officers in the policy offices of both AFMC and its subordinate command ASC. The central

theme of the responses seemed to indicate that a majority of the provisions that the author concluded to be relevant to reducing protests were being practiced by their organizations prior to FASA's enactment. The relevant provisions being referred to are those that pertain to the content and administration of post-award debriefs, and identification of all significant evaluation factors in solicitations. In order to test this proposition, the author will conduct structured telephone interviews with contracting officers in AFMC and its subordinate commands, ASC, SPC, and ESC. AFMC was chosen as the unit of analysis in this study because it manages approximately 52% of the annual United States Air Force budget and represents the largest buying organization in that service [Wright-Patterson: Legacy, 1995: 17]. Results from the interview should be acceptable for generalization to the Air Force as a whole since AFMC constitutes such a large proportion of the Air Force's acquisition activity. The primary research question to arise as a result of this proposition is "How did FASA impact Air Force source selection procedures as they relate to content and administration of post-award debriefs, and evaluation criteria practices." Refer to chapter 3 for details on the content of the interview and how it will be used to assay proposition #1.

Proposition #2: FASA has not impacted post-award protest frequency within the United States Air Force. FASA was intended to reduce protests by introducing more stringent requirements for the administration and content of post-award debriefs, and mandating the identification of all significant evaluation factors in solicitations. In order for these measures to have an impact on protest frequency however, they would have to change pre-existing contracting policy and procedures. While the entire Executive

Branch of the United States Government is subject to the Act, it affected individual agencies differently due to variances in pre-existing policies. The author maintains, as stated in proposition #1, that FASA did not significantly impact the Air Force's source selection process. Therefor, it would seem logical that FASA did not impact post-award protest frequency within the Air Force. To test proposition #2 and identify any trends or statistically significant differences, the number of annual protests within the Air Force will be compared between pre- and post-FASA enactment. The primary research question to arise as a result of this proposition is "What impact did FASA have on protest frequency?" Refer to chapter 3 for further details on the statistical methods employed in this analysis.

Proposition #3: FASA has not impacted the quality of proposals submitted by potential offerors in response to Air Force solicitations. Proponents of FASA maintained that a side benefit of the more thorough debriefs mandated by the Act would result in better quality proposals in the future. They believed that providing the added information would allow the unsuccessful offerors to learn from their mistakes and inadequacies, and submit proposals in the future that would be more responsive to Government solicitations. As previously stated in proposition #1, the author believes that FASA did not significantly alter the Air Force's source selection process. Preliminary indications, based on discussions with AFMC personnel, are that FASA did not impact the content or administration of the post-award debriefs conducted by AFMC. To test this proposition, the same case study methods applied in testing proposition #1 will be used. The structured interview conducted for proposition #1 will also contain questions to

ascertain whether contracting officers within AFMC and its subordinate commands have witnessed an improvement in the quality of proposals since the implementation of FASA. The primary research question to arise as a result of this proposition is "How did FASA affect the quality of candidate bids?" Quality of proposals will be defined as responsiveness to Government requirements and solicitations. For further details on the content of the interview and how it will be used to measure this proposition, refer to chapter 3.

#### Summary

This chapter identified and discussed the costs of protests, the importance of postaward debriefs, and some of the Government's efforts at minimizing protest frequency.

This discussion leads to the question of whether the Government's efforts have been
effective in meeting their goal of reducing the frequency of protests. Prior research has
indicated that CICA made filing protests easier and that protests actually increased 1015% over the following years as a result. FARA just went into effect on 1 January 1997,
so it would be premature at the time of this writing to study its effects, due to lack of data.

FASA on the other hand has been in effect for over two years at the time of this writing
and sufficient data should be available to conduct a preliminary analysis of any effects it
may have had on protest frequency. Known previous research had considered FASA in
its analysis of the Army's installation level post-award debriefing process and included
recommendations for improvement. At the time of this writing however, there did not
appear to be any known research on FASA's effects on the frequency of protests or
whether offerors' proposals have improved as a result.

To provide further insight into the effectiveness of Government actions in this area, the author developed three propositions as the focus of this research. The propositions are related to the impact of FASA on Air Force source selection processes and frequency of post-award protests within that agency.

In order for the provisions of FASA to have an impact on protest frequency, they would have to change pre-existing contracting policy and procedures. Some maintain that this was not the case and that existing contracting practices were not modified as a result of the Act's implementation. They assert that the above mentioned measures were already being practiced in their organization prior to the passage of FASA. Critics of the Act also contend that FASA's requirement to utilize past performance as an evaluation factor could contribute to an increase in protest frequency.

Based on the evidence uncovered during the literature review, the author proposes that FASA has had negligible affect on actual contracting practices and consequently has neither increased nor decreased protest frequency. Additionally, since it is believed that the Act had little effect on actual contracting practices, the author also proposes that the quality of candidate bid proposals has remained unchanged. The next chapter will discuss in detail, the procedures the author will employ to test these propositions.

# III. Methodology

#### General

Chapter III describes the research procedures used to meet the research objectives and to test the propositions posed in Chapter II. First, this chapter describes those methods used in an attempt to secure detailed data on the frequency of bid protests within the Air Force. Second, this chapter outlines the structured interview conducted, including: 1) the sample population; 2) selection of the sample size; 3) interview preparation and content; and, 4) statistical methods used to analyze the survey data. Information for this thesis was collected through a literature review, structured interviews with contracting officers, published and unpublished GAO data, and published and unpublished Air Force Material Command data.

### Discussion of Variables

<u>Major Constructs</u>. The following constructs are contained in the research design and warrant definition:

1. Protest: A protest, as formally defined by the Federal Acquisition Reform Act of 1994, includes a written objection to a solicitation, cancellation of a solicitation, award or proposed award, and termination or cancellation of an award if improprieties are alleged. For the purposes of this study, we will concentrate only on the number of protests filed in response to objections to solicitations, awards, or proposed awards within AFMC.

- Quality of Proposals: Quality of proposals will be defined as responsiveness to Government solicitations and deals with the question of whether the offeror has promised to do exactly what the Government has requested. A key element of the sealed bid system is that non-responsive bids may not be considered by contracting officers and must be rejected. This requirement is derived from the statutory provision that provides that award be made to the bidder whose bid conforms to the solicitation, 10 U.S.C. § 2305(b)(3), 41 U.S.C. § 253b (c) [Cibinic and Nash, August 1986: 394]. Candidate bids must provide sufficient information to allow the contracting officer to determine whether the overall bid is responsive. Proposals should contain the requisite supporting data, information, documentation, certification, etc.
- Bid Protests: This is a measure of the number of annual bid protests
  filed against the Air Force as a proportion of the number of solicitation awards
  within that agency that same year.
- 4. Changes In Source Selection Practices: This refers to changes in actual contracting practices to occur as a result of FASA's implementation. More specifically, this study focuses on AFMC's source selection policies related to the administration and content of post-award debriefs and evaluation criteria.
- 5. Changes In Quality Of Candidate Proposals: Pertains to the completeness and responsiveness to all requirements of the solicitation.

<u>Constructs To Be Tested</u>. The variables used in this design were derived from the literature review and the author's judgment of the factors important to test the propositions. The following are the constructs to be tested in investigating the propositions:

- 1. Debrief Content The practice of providing an increased amount of information during post-award debriefs to unsuccessful offers. The information of interest in this study pertains to information regarding reasons why unsuccessful offerors were excluded from further consideration, information regarding weaknesses in unsuccessful offeror's proposals, and providing the overall ranking of all offerors.
- Responsiveness The practice of providing post-award debriefs to unsuccessful offerors within five days of a request.
- 3. Evaluation Factors The practice of using contractor past performance as an evaluation factor. This construct also includes the practice of identifying in its solicitations, all significant evaluation factors and their relative importance.

## Operationalization of the Variables

There are several strategies available to conduct research. Each strategy has peculiar advantages and disadvantages, depending upon three conditions: (a) the type of research question, (b) the control an investigator has over actual behavioral events, and (c) the focus on contemporary as opposed to historical phenomenon [Yin, 1994: 1].

Table 1 displays these three conditions and shows how each is related to five major research strategies.

Table 1. Relevant Situations for Different Research Strategies [Yin, 1994: 6].

Strategy	Form of research question	Requires control over behavioral events?	Focuses on contemporary events?
experiment	how, why	yes	yes
survey	who, what, where,how many,how much	no	yes
archival analysis	who, what, where,how many,how much	no	yes/no
history	how, why	no	no
case study	how, why	no	yes

To effectuate the objective of this research, the author developed three propositions. Two different strategies will be employed to test the three propositions since they are based on relatively different conditions. The first and third propositions are related to the impact of FASA on particular source selection procedures and candidate proposals. The form of research questions used in addressing these propositions entails the use of "how": (a) how did FASA impact Air Force source selection procedures as they relate to debriefs and evaluation criteria, and (b) how did FASA affect the quality of candidate bids. Additionally, addressing these two propositions would focus on contemporary events and not require control over behavioral events. Consequently, a case study analysis methodology is the most appropriate strategy to test propositions 1 and 3 according to Table 1 [Yin, 1994: 6].

Proposition 2 on the other hand, could be more appropriately addressed through an alternate strategy since it evokes a "what" form of research question; what impact did FASA have on protest frequency? Additionally, addressing this proposition deals with both contemporary and historical events and does not require control over behavioral events. Based on these conditions, an archival analysis is a more suitable strategy for analyzing proposition 2 [Yin, 1994: 6].

Since this study will involve two different strategies of analysis, it will be broken down into two phases. As depicted in Figure 1, the first phase will be a case study method and will consist of structured interviews. The second phase will then be conducted through archival analysis of protest data. Conclusions will be drawn based on the combinations of findings from each phase. The following sections discuss the two strategies in more detail.

Case Study. In general, case studies are the preferred strategy when "how" or "why" questions are being posed, when the investigator has little control over events, and when the focus is on a contemporary phenomenon within some real-life context [Yin, 1994: 1]. A common misconception is that the various research strategies should be arrayed hierarchically. It was once taught that case studies were appropriate for the exploratory phase of an investigation, that surveys and histories were appropriate for the descriptive phase, and that experiments were the only way of doing explanatory or causal inquiries [Yin, 1994: 3]. The hierarchical view reinforced the idea that case studies were only an exploratory tool and could not be used to describe or test propositions.

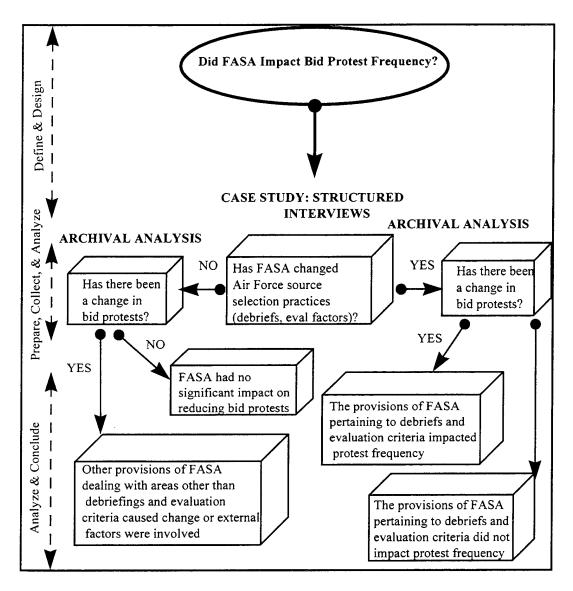


Figure 1. Design of Study.

This hierarchical view, however is incorrect. Experiments with an exploratory motive have certainly always existed. In addition, the development of causal explanations has long been a serious concern of historians, reflected by the subfield known as historiography [Yin, 1994: 3]. Finally, case studies are far from being only an exploratory strategy. Some of the best and most famous case studies have been both

descriptive (i.e. Whyte's Street Corner Society, 1943/1955) and explanatory (Allison's Essence of Decision: Explaining the Cuban Missile Crisis, 1971) [Yin, 1994: 3].

The more appropriate view of these different strategies is a pluralistic one. Each strategy can be used for all three purposes - exploratory, descriptive, or explanatory [Yin, 1994: 3]. What distinguishes the strategies is not this hierarchy, but the three conditions discussed earlier. As previously mentioned, addressing the research questions posed by propositions 1 and 3 would be most appropriately accomplished through a case study strategy based on the surrounding conditions.

The next question is which method to use for data collection. Data collection for case studies can rely on many sources of evidence, including direct observation, documentation, physical artifacts, and projective techniques. One of the most important sources of case study information is the interview [Yin, 1994: 84]. Well informed respondents can provide important insights into a situation. They can also provide shortcuts to the prior history of the situation, helping to identify other relevant sources of evidence.

Therefore, telephone interviews were conducted with PCO's throughout AFMC and its subordinate commands (ASC, ESC, SPC) to determine various impacts of FASA on the systems-level contracting process. The scope of the interview is somewhat limited but will provide some insight into the impacts of the Act.

The goal of this study will be to provide insight into whether FASA reduced award protests within AFMC and whether offeror's proposals have improved as a result of FASA. AFMC was chosen as the unit of analysis in this study because it manages

approximately 52% of the annual United States Air Force budget and represents the largest buying organization in that service [Wright-Patterson: Legacy, 1995: 17]. Results from the interview should be acceptable for generalization to the Air Force as a whole since AFMC constitutes such a large proportion of the Air Force's acquisition activity. The interview will concentrate on the systems arena versus operational contracting and attempt to disclose any differences in particular areas of contracting policy to occur as a result of FASA. These areas will include post-award debriefs, and evaluation factors. Additionally, the survey attempted to gain the interviewees insight into the impact of these changes on the frequency of award protests and quality of proposals. The following are the research propositions addressed by this phase of the study:

<u>Proposition #1</u>: FASA has not impacted the United States Air Force's source selection processes in a manner that would significantly affect post- award protest frequency.

<u>Proposition #3</u>: FASA has not impacted the quality of proposals submitted by potential offerors in response to Air Force solicitations.

The interview was structured, to enhance reliability, and consisted of eight questions with multiple parts (see appendix A for the interview script). The course of the interviews were determined by the interviewees' responses to the different questions. Questions 1 through 3 addressed the constructs pertaining to "Debrief Content" and were intended to assess whether FASA increased the amount of information disclosed during post-award debriefs. If 80% or more of the respondents chose "a - increased information" as a response to question 1, the "Debrief Content" construct reflected that "FASA resulted in the practice of providing an increased amount of information regarding

reasons why unsuccessful offerors were excluded from further consideration during post-award debriefs." The decision value of 80% was chosen because of the desire to conclude with a certain degree of rigor, considering the limited number of interviews conducted, that particular responses indicate an impact in procedures has occurred. Using a majority of 60 or even 70% would be too conservative and would allow too much room for Type I and Type II errors in this methodology. If 80% or more of the respondents chose "a - Previously Done" to question 1a, the "Debrief Content" construct reflected that "FASA did not change the amount of information provided regarding reasons why unsuccessful offerors were excluded from further consideration during post-award debriefs." If both of the two previous responses received less than 80%, the "Debrief Content" construct reflected that "all of the provisions of FASA have yet to be implemented and their affects on the amount of information provided regarding reasons why unsuccessful offerors were excluded from further consideration during post-award debriefs is unknown."

If 80% or more of the respondents chose "a - increased information" as a response to question 2, the "Debrief Content" construct reflected that "FASA resulted in the practice of providing an increased amount of information regarding weaknesses in unsuccessful offerors' proposals during post-award debriefs." If 80% or more of the respondents chose "a - procedures already adequate" to question 2a, the "Debrief Content" construct reflected that "FASA did not change the amount of information provided regarding weaknesses in unsuccessful offerors' proposals during post-award debriefs." If both of the two previous responses received less than 80%, the "Debrief

Content" construct reflected that "all of the provisions of FASA have yet to be implemented and their affects on the amount of information provided regarding weaknesses in unsuccessful offerors' proposals during post-award debriefs is unknown."

If 80% or more of the respondents chose "a- included ranking" as a response to question 3, the "Debrief Content" construct reflected that "FASA did not change the practice of providing the overall ranking of all offerors' proposals during post-award debriefs to unsuccessful offerors." If 80% or more of the respondents chose "a - now includes ranking" to question 3a, the "Debrief Content" construct reflected that "FASA resulted in the practice of providing practice of providing the overall ranking of all offerors' proposals to unsuccessful offerors during post-award debriefs." If both of the two previous responses received less than 80%, the "Debrief Content" construct reflected that "all of the provisions of FASA have yet to be implemented and their affects on providing the overall ranking of all offerors' proposals during post-award debriefs to unsuccessful offerors' is unknown."

Question 4 addressed the "Responsiveness" construct and focused on if FASA changed the response time to requests for debrief. If 80% or more of the respondents chose "a - procedures already adequate" as a response to question 4a, the "Responsiveness" construct reflected that "FASA did not change the response time to requests by unsuccessful offerors for post-award debriefs." If 80% or more of the respondents chose "a - change in procedures" to question 4, the "Responsiveness" construct reflected that "FASA resulted in a change in the response time to requests by unsuccessful offerors for post-award debriefs." If both of the two previous responses

received less than 80%, the "Responsiveness" construct reflected that "all of the provisions of FASA have yet to be implemented and their affects on providing the overall ranking of all offerors' proposals during post-award debriefs to unsuccessful offerors' is unknown."

Question 5 addressed the "Evaluation Factors" construct and was intended to assess whether organizations started using past performance as an evaluation factor pursuant to FASA. If 80% or more of the respondents chose "a - procedures already adequate" as a response to question 5 and "b - procedures not changed" to question 5c, the "Evaluation Factors" construct reflected that "FASA did not change the practice of using past performance as an evaluation factor." If 80% or more of the respondents chose "a - procedures changed" to question 5a or 5c, the "Evaluation Factors" construct reflected that "FASA did change the practice of using past performance as an evaluation factor." The "Evaluation Factors" construct reflected that "all of the provisions of FASA have yet to be implemented and their affects on using past performance as an evaluation factor is unknown," in the event that any outcome other than those discussed above was received.

Question 6 also addressed the "Evaluation Factors" construct and was intended to assess whether organizations started identifying in their solicitations, all significant evaluation factors and their relative importance in the selection, pursuant to FASA. If 80% or more of the respondents chose "a - procedures already adequate" as a response to question 6 and "b - procedures not changed" to question 6c, the "Evaluation Factors" construct reflected that "FASA did not change the practice of identifying in solicitations.

all significant evaluation factors and their relative importance in the selection." If 80% or more of the respondents chose "a - procedures changed" to question 6a or 6c, the "Evaluation Factors" construct reflected that "FASA did change the practice of identifying in solicitations, all significant evaluation factors and their relative importance in the selection." The "Evaluation Factors" construct reflected that "all of the provisions of FASA have yet to be implemented and their affects on identifying in solicitations, all significant evaluation factors and their relative importance in the selection is unknown," in the event that any outcome other than those discussed above was received.

Question 7 attempted to discern whether the contracting process has been altered by the Act, and if so, which particular changes have had the most influence on any changes in protest frequency. It was intended to be a "catch-all" question to identify any areas that were overlooked by the researcher. Additionally, it was intended to gather the practitioners' opinions and insights into what provisions of FASA, if any, had the greatest impact on post-award protest frequency. This data was compiled and will be presented in tabular format in chapters 4 and 5. If 80% or more of the respondents chose "a - procedures changed" as a response to question 7, there was a sufficient indication that "FASA did change the organizational contracting practices within AFMC." If 80% or more of the respondents chose "b - procedures unchanged" to question 7, there was a sufficient indication that "FASA did not change the organizational contracting practices within AFMC." Any other responses were clarified by the results obtained in questions 7a or 7b, which are open ended questions.

Finally, question 8 was intended to assess changes in the quality of offeror's proposals. Quality of proposals, for the purposes of this study, is meant to pertain to the completeness and responsiveness to all requirements of the solicitation. If 80% or more of the respondents chose "a - improved" as a response to question 8 and "a, b, or c" to question 8a, there was sufficient indication that "FASA appears to have resulted in an improvement in the quality of candidate proposals." If 80% or more of the respondents chose "b - degraded" to question 8 and "a, b, or c" to question 8b, there was sufficient indication that "FASA appears to have resulted in a degradation in the quality of candidate proposals." There was sufficient indication that "the quality of candidate proposals does not appear to have been affected by the implementation of FASA," in the event that 80% or more of the responses are from another category.

Table 2 will serve as a decision matrix to form conclusions once it is completed by filling in the response rates from the interviews. This table will be filled in with the responses received and used to draw conclusions in Chapter V. Questions marked with an asterisk are the critical decision factors that will suggest a change has occurred if at least one receives a response rate of 80% or greater and will cause an overall rejection of the null hypothesis formed by proposition #1 that FASA has not impacted the United States Air Force's source selection processes in a manner that would significantly affect post-award protest frequency. If none of the questions marked with an asterisk receive at least an 80% response rate, we fail to reject the null hypothesis.

Additionally, if responses "a - improved proposals" or "b - degraded proposals" to question #8 received a response rate of 80% or greater, the null hypothesis formed by

proposition #3 that FASA has not impacted the quality of proposals submitted by potential offerors in response to Air Force solicitations was rejected. If response "c - no change" received at least an 80% response rate, we failed to reject the null hypothesis.

The perceptions of Air Force systems-level PCO's were sought for several purposes. First, the contracting officers are at the end of a chain of events that begin with enactment of legislation. Before a study could be conducted to determine whether FASA resulted in a change in award protest frequency, it was first necessary to determine whether FASA had any impact on the way the selection process is conducted. The PCO's, as first- hand users of the selection process, were in an advantageous position to provide this insight. Special care was taken to only interview those PCO's who were involved in contracting prior to FASA's enactment. Ideally, this population would consist of those PCO's who were involved in contracting prior to FASA and still work for the same organization. For this reason, the population of those interviewed consisted primarily of civilian contracting officers.

A pilot test of the interview was conducted using three Graduate Contracting students at the Air Force Institute of Technology (AFIT) as respondents. The respondents were civilian contracting officers with significant experience in the systems-level procurement arena at AFMC. The test proved that the questions were not unreasonable and seemed likely to work in a telephone environment.

Table 2. Decision Matrix For Interview Responses. One or more of any question marked by an asterisk that receives >= 80% of the responses will indicate that FASA has changed actual contracting practices within AFMC.

QUEST.	>= 80% RESP.	CONCLUSION	DECISION
1,2	А	FASA resulted in the practice of providing an increased amount of information to unsuccessful offerors during post-award debriefs	
	В	Refer to question 1a	
	С	Insufficient evidence exists to make determination	
1a,2a	А	FASA did not result in the practice of providing an increased amount of information to unsuccessful offerors during post-award debriefs	
B,C,D		Insufficient evidence exists to make determination	
3 A		FASA did not result in the practice of providing an increased amount of information to unsuccessful offerors during post-award debriefs	
	В	Refer to question 3a	
С		Insufficient evidence exists to make determination	
3a	Α	FASA resulted in the practice of providing an increased amount of information to unsuccessful offerors during post-award debriefs	*
	B,C	Insufficient evidence exists to make determination	
4 A		FASA changed the response time to requests by unsuccessful offerors for post-award debriefs	
	В	Refer to question 3a	
С		Insufficient evidence exists to make determination	
		FASA did not change the response time to requests by unsuccessful offerors for post-award debriefs	
B,C,D	B,C,D	Insufficient evidence exists to make determination	
5a,6a A		FASA changed evaluation factor practices	*
	В	FASA has not changed evaluation factor practices	<del></del>
	С	Insufficient evidence exists to make determination	· · · · · · · · · · · · · · · · · · ·
5c,6c	A FASA changed evaluation factor practices		*
В С	В	FASA did not change evaluation factor practices	
	С	Insufficient evidence exists to make determination	
7 A		FASA changed contracting practices	*
	В	FASA has not changed contracting practices	
	С	Insufficient evidence exists to make determination	

Additionally, the interview checklist was reviewed for content and validity by Major Caisson Vickery, Ph.D. Major Vickery is a contracting officer with significant experience in both operational and systems contracting and is currently an Assistant Professor of Contract Management at AFIT's Graduate Contracting Management Program. His contributions aided the author in further refining the reliability of the questionnaire.

The scope of the interviews included five interviews at ASC, five interviews at ESC, and five interviews at SPC, for a total of 15 interviews. Reductions in personnel and large Government procurements has diminished the available pool of potential subjects with the requisite experience for the interview. Therefor the number of interviews established for this study was based on a desire to obtain an adequate amount and spread of data with the limited available resources. The individuals interviewed were chosen with the assistance of highly placed military or civilian contacts. For specifics on the interview, refer to the script found in Appendix A.

As indicated by Figure 1, this was a two-part study and it was necessary to gather two types of information in order to draw any conclusions. The first type of information, whether FASA has changed contracting practices within AFMC, was previously discussed. Once this information was obtained, the next step was to determine whether there has been a change in the frequency of actual bid protests occurring annually. The next section will discuss what methods used in this analysis.

<u>Protest Frequency Analysis</u>. Since protest frequency is indicative of contractor willingness to file protests, it would be significant if trends differ before and after FASA.

Data was collected on the number of bid protests filed against ASC annually, both before the enactment of FASA and afterwards. These periods included data from fiscal years 1993 through 1996 with preliminary data through June of fiscal year 1997. The data consisted of total protests received and number of new competitive contract awards of \$3 million or more.

The data was limited as previously mentioned, to ASC since this type of data is not tracked by the other two sub-commands. This limitation should not impact the external validity of the study however. The representativeness of a sample refers to "the degree of similarity between the characteristics of the sample and the characteristics of the universe from which the sample is drawn," [Clover and Balsley, 1984: 81]. "Ideally, the characteristics with which the study is concerned should be found in the same proportions as they occur in the universe," [Clover and Balsley, 1984: 81]. In this phase of the study, the universe is considered to be protest frequency within AFMC. The sample is the protest frequency within ASC. The following reasons are given for justification of the representativness of ASC data: (1) the activities of all three subcommands center around large, major-system type procurements for the Air Force; and (2) "Lightning Bolt" #4 mandated the removal of center-level policies, therefor all three sub-commands should be operating under the same acquisition regulations. Various methods are available to attempt to determine whether trends and any shift corresponding to FASA are identifiable.

The first analysis consisted of a year by year comparison of the protests to discern whether there has been any changes over the 5 year period. Proper consideration was

given to the reduction of the number of procurements and the effects of other Federal Acquisition Reform initiatives. This was partially accomplished by using protests as a percentage of total contracts awarded that same year. Each year's data consisted of the number of protests as a proportion of contract awards of \$3 million or greater that same fiscal year (p<sub>i</sub>). The research hypotheses for this test are as follows:

H<sub>o</sub>: 
$$p_1 = p_2 = p_3 = p_4 = p_5$$
  
H<sub>a</sub>:  $p_1 \neq p_2 \neq p_3 \neq p_4 \neq p_5$ 

The second analysis consisted of a comparison between the pre- and post-FASA periods to discern whether there is a difference between the two periods. The pre-FASA period consisted of fiscal years 1993-1994, and the post-FASA period consisted of 1996-1997. Fiscal year 1995 was considered to be a transition period since the various provisions of the Act were implemented at different times with overall implementation completed by October 1, 1995. The research hypotheses for this test are as follows:

$$H_0: p_1 = p_2$$
  
 $H_a: p_1 \neq p_2$ 

There were several alternatives available to conduct an analysis of these data. Ideally we would have wanted to use a parametric statistical test since they make maximum use of all the information that is inherent in the data [Runyon and Haber, 1971: 236]. Additionally, parametric tests were preferred for this analysis because they are more powerful and contain less risk of failing to reject a false null hypothesis [Runyon and Haber, 1971: 235]. In order to use such tests, however it was first necessary to ensure that the data lent themselves to analysis in terms of the normal probability curve, or met the basic assumptions for their application [Runyon and Haber, 1971: 229]. The

first assumption required that the samples be drawn from normal populations. This particular assumption is where we encountered a problem with this data. The population, which consisted of each fiscal years protests within the Air Force, from which the samples were drawn, are not of sufficient size to assume normality under the Central Limit Theorem. Additionally, the data is categorical, either there were protests or not, and this precluded the assumption of normalcy as well.

When the assumptions underlying a statistical test are violated, the test may lose much of its strength [VanMatre and Gilbreath, 1980; 466]. In the instance where the data do not lend themselves to these prerequisites, it may become necessary to use a non-parametric test. Since the data could not support the assumptions required for a parametric method, it was necessary to use the non-parametric Chi-square for this study.

The Chi-square test for independence appeared to be the most appropriate since there were two or more related or matched samples and our objective was to determine whether the samples are drawn from identical populations [Ott, 1988: 253]. The following assumptions for the Chi-square test are quite unrestrictive and do not specify the form and/or shape of the population form which the sample is drawn: (1)the expected frequency for each cell should be at least five; (2) the scale of measurement is at least nominal; (1) the samples are random and independent; and (4) the data in each sample is frequency in form and categorized into mutually exclusive and exhaustive categories [Brewer, 1991: 7-14]. The assumptions of the Chi-square test was satisfied by the data and the determination of the data's suitability for this test is discussed in Chapter IV.

All of the hypotheses were tested to the .05 level of significance to minimize risk of Type I error. The results from the second analysis comparing the two periods was used to address the second proposition posed in chapter II, **FASA has not impacted post-award protest frequency within the United States Air Force.** Failing to reject the null hypothesis at the .05 level of significance would indicate that the samples are drawn from identical populations and that FASA has not impacted protest frequency within the Air Force. The results from the first test between each individual fiscal year was used to confirm those results and provide further analysis for discussion.

## Summary

In order to successfully test the propositions of this study, it was necessary to conduct a two phase approach. The first phase consisted of structured telephone interviews and was intended to yield data that answered the question as to whether particular practices have changed as a result of FASA. These interviews also provided insight into whether contractor proposals have improved in quality as a result of FASA.

The second phase employed statistical analysis to discern whether the frequency of post-award protests has changed over a relevant time period. The results from both phases of the research was combined to arrive at our conclusions, as indicated by the study design in Figure 1. The next chapter provides the results of the analyses that was discussed above.

#### IV. Analysis

#### General

This chapter presents the data collected and analysis of the answers provided by the respondents to the structured interviews. The first section will detail the results of the structured interviews. Responses will be broken down demographically by command and function to identify any anomalies or trends that may occur. The next section will present the protest data collected from various agencies. Additionally, a discussion of the test selection based on the properties of the data will be included along with results of the statistical analysis that was conducted.

#### **Structured Interview Results**

Fifteen structured telephone interviews were conducted with PCO's throughout AFMC and its subordinate commands (ASC, ESC, SPC) to determine various impacts of FASA on the systems-level contracting process. The number of interviews were divided evenly between the commands with each receiving five interviews.

As previously mentioned in Chapter III, PCO's were chosen since they are first-hand users of the source selection process and could provide valuable insights into any changes that might have occurred. Potential candidates for the interviews were asked screening questions to ensure that they had adequate source selection experience both pre- and post-FASA. The necessary experience requirements often resulted in active duty military officers being excluded as candidates for the interview since they tend to rotate positions more frequently than their civilian counterparts. Consequently, all but one of

the interviewees were civil service employees. The author also attempted to equitably distribute interviews between PCO's in system program offices (SPO's), and support agencies, such as source selection agencies and policy offices within the three subordinate commands. This proved to be rather challenging however due to reductions in defense spending and acquisition personnel, fewer new programs, and a preponderance of sole source contracts. Despite the difficulties the author was able to maintain a 60% to 40% split, with PCO's in system program offices being in the minority. The following section will discuss the responses received.

<u>Findings</u>. In this section, responses to each question are presented and analyzed by subordinate command and personnel demographics (SPO versus support personnel).

Tables 8-12 found in Appendix B provide a tabular representation of the responses and break them down demographically by command, and support versus SPO personnel. The contents of these tables will be discussed in further detail, question by question.

Question #1: Pursuant to FASA, has your organization increased the amount of information provided to unsuccessful offerors during post-award debriefs regarding reasons why they were excluded from further consideration?

- a) Yes [93%]
- b) No [7%]
- c) Don't know [0]

Analysis: Table 8 contains the overall responses to the interview throughout AFMC. The first number in each cell is the total number of interviewees that chose that particular response. The second number is the percentage of interviewees that chose that response. The interview was structured in a manner that different responses may have dictated additional or different questions be asked for clarification or additional detail. That

explains why some rows add up to less than the total number of respondents. Some of the questions that were asked were open ended questions and are not included in any of the tables. The responses received to those questions are discussed throughout this section. Refer to the Appendix for a copy of the structured interview script.

Referring to Table 8, 93 % of those interviewed responded "yes" to question 1, while only 7% responded "no." Tables 9, 10, and 11 break the responses down by subcommand. As previously mentioned, the scope of this study was limited to AFMC and the interviews were conducted equitably between its three primary subcommands, ASC, ESC, and SMC. Tables 9, 10, and 11 in Appendix B have the same format as Table 8, with the first number representing the total number of each response received and the percentage of interviewees that responded with that option.

Table 12 depicts the responses demographically by support agency versus system program office. The format of Table 12 varies slightly from the previous tables. Each response cell is separated into two categories: support and SPO. The numbers in each cell represent the percentage of those interviewees in each category that responded with that particular option. As was the case with the previous tables, interviewees may have been asked a different sequence of questions based on previous responses. Consequently, while the responses to each question may add up to 100%, it is based on those required to answer that particular question, and not the entire group as a whole.

Additionally, the following charts (Figure 2) provide a graphic representation of the responses. These charts are a summation of that data presented in Tables 8 through 12 and pertains to question 1.

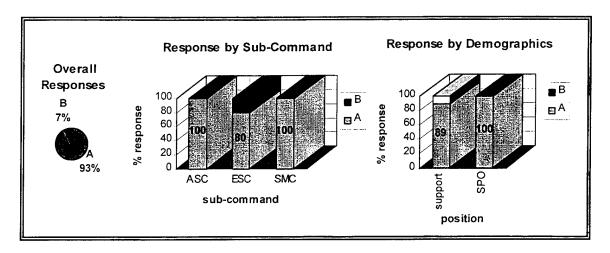


Figure 2. Graphic Response Representation For Question #1.

All of those surveyed, with the exception of one, felt that their organization increased the amount of information provided to unsuccessful offerors during post-award debriefs regarding reasons why they were excluded from further consideration pursuant to FASA. The lone respondent that chose answer "b" for question 1 felt that their organization was already providing informational content during debriefs that met or surpassed FASA requirements. Therefor, he felt that FASA had no impact on his organization's contracting process in this particular area.

Question #2: Pursuant to FASA, has your organization increased the amount of information provided to unsuccessful offerors during post-award debriefs regarding weaknesses in their proposal?

- a) Yes [93%]
- b) No [7%]
- c) Don't know [0]

Analysis: Question #2 was very similar to question #1 but was intended to gather additional insights into whether FASA impacted debrief content. The responses to this question were identical to those encountered in question #1, with all respondents, with the exception of one, maintaining that there has been an increase in information provided to

unsuccessful offerors during post-award debriefs. The same individual who answered "no" to question 1 also answered "no" to question #2. He used the same reasoning that their organization was already providing informational content during debriefs that met or surpassed FASA requirements. Therefor, he felt that FASA had no impact on his organization's contracting process in this particular area as well.

Question #3: Did your organization include the overall ranking of all offerors during post-award debriefs to unsuccessful offerors prior to FASA?

- a) Yes [0]
- b) No [93%]
- c) Don't know [7%]

Analysis: Once again, there was nearly a complete agreement on the answer to this question. All of those interviewed, with the exception of one, agreed that their organizations did not provide some form of ranking during post-award debriefs prior to FASA. Tables 8 through 12 break down the responses by sub-command and limited demographics and the Figure 3 provides a graphic representation of the responses.

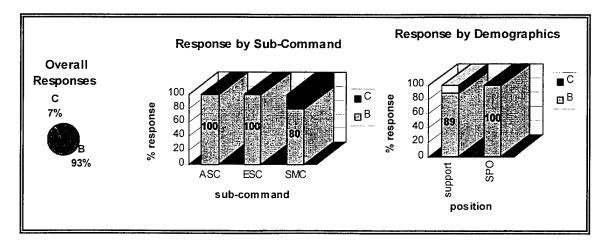


Figure 3. Graphic Response Representation For Question #3.

As indicated, there was once again a lone dissident in the group of respondents. This time however, the respondent was not in disagreement with the others but was unsure of the answer, so he answered "don't know." This individual was not the same subject that responded differently than the others in questions 1 and 2. In order to determine whether FASA had any impact on the organization-level contracting process in this area, the next question focused on whether any changes had occurred in this arena after FASA's implementation.

Question #3a: Does your organization now include the overall ranking of all offerors during post-award debriefs to unsuccessful offerors?

- a) Yes [33%]
- b) No [60%]
- c) Don't know [7%]

Analysis: This question became one of the early discriminators in the interview. Most of the respondents agreed in the previous question that their organizations did not provide some form of ranking during debriefs. However, question #3a demonstrated that there was less agreement as to whether this practice was implemented after FASA's introduction, with 60% saying that FASA did not affect practices in this area and 33% saying that they were. Tables 8 through 12 break down the responses by sub-command and limited demographics and Figure 4 provides a graphic representation of the responses.

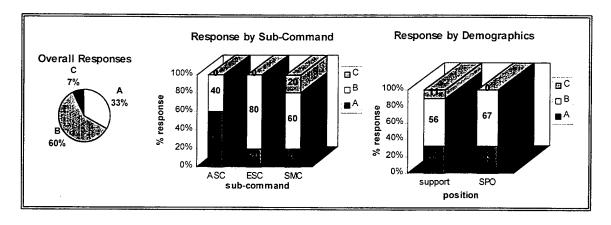


Figure 4. Graphic Response Representation For Question #3a.

The respondent that chose "don't know" in question 3 chose the same response for questions 3a and 3b as well. Figure 3 above illustrates that a majority of ASC personnel tended to believe that FASA had changed their contracting practices in this area. The other two commands shared their disagreement however and seemed to indicate that nothing has changed in this area. Interestingly enough however was that there was virtually no disagreement between SPO and support personnel.

A majority (89%) of those that responded that there had been no such change as a result of FASA indicated that such provisions were not applicable to their organizations for one reason or another. Additionally, they agreed (89%) that they did not expect such provisions to be implemented at their organizations any time in the near future.

Question #4: Pursuant to FASA, has your organization changed its response time to debrief requests made by unsuccessful offerors?

- a) Yes [67%]
- b) No [33%]
- c) Don't know [0]

Analysis: This question is another instance where the results may not be unquestionably conclusive despite the fact that the spread is greater than the responses from question 3 and none of the subjects responded with "don't know." Tables 8 through 12 break down the responses by sub-command and limited demographics and Figure 5 provides a graphic representation of the responses.

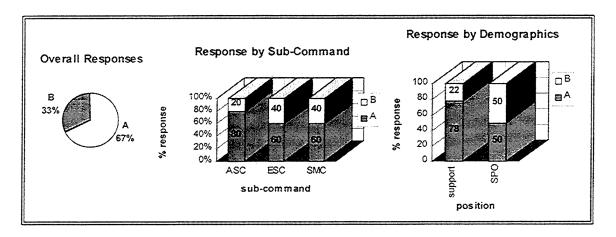


Figure 5. Graphic Response Representation For Question #4.

The responses vary slightly between ASC and the other sub-commands, however they still somewhat close. Respondents in support agencies indicated that their organizations have decreased their response times as a result of FASA however the SPO's were evenly split on the issue. Those that indicated that response times have not changed were in complete agreement that pre-existing procedures and practices either met or exceeded the timelines called for by the provisions of FASA.

Question #5: Did your organization include contractor past performance as an evaluation factor prior to the enactment of FASA?

- a) Yes [80%]
- b) No [20%]
- c) Don't know [0]

Analysis: The overall results from question 5 seem to be more conclusive than some of the previous questions. A majority of those interviewed maintained that contractor past performance was used as an evaluation factor prior to FASA. However, as indicated by Figure 6, there was some disparity in responses between the subcommands.

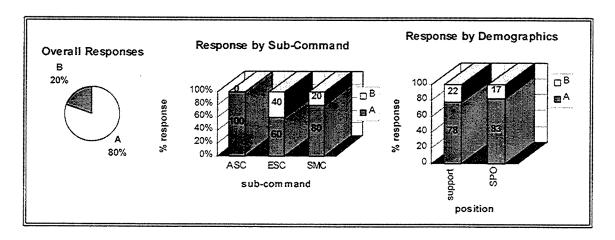


Figure 6. Graphic Response Representation For Question #5.

While there was little differences in responses between SPO and support personnel, there was a notable dissimilarity in responses between the sub-commands.

ASC personnel unanimously responded that past performance was used prior to FASA while ESC was nearly evenly split. Those that responded that their organization had not used contractor past performance prior to FASA were further questioned whether their

organizations now use that data pursuant to FASA. Sixty-seven percent of those respondents indicated that their organizations now use past performance. There was quite a disparity between the sub-commands in this particular area. ESC personnel were evenly split as to whether any change in this area has occurred, while SMC responded unanimously that their organizations now use this data, indicating FASA had impacted this area of their contracting process. As previously mentioned, ASC personnel unanimously responded that past performance was used prior to FASA so they were not administered this particular question. These results seem to indicate that the three different sub-commands may have been using three distinctly different practices in the area of evaluation factors.

Those subjects that indicated that past performance data was used by their organizations as evaluation factors prior to FASA were further questioned as to whether FASA may have changed the way that this data was used in source selections after the Act's implementation.

Question 5c: Did the implementation of FASA change the way your organization used contractor past performance as an evaluation factor

- a) Yes [69%]
- b) No [31%]
- c) Don't know [0]

Responses varied once again, both between sub-commands and across the demographic variables as indicated in Figure 7.

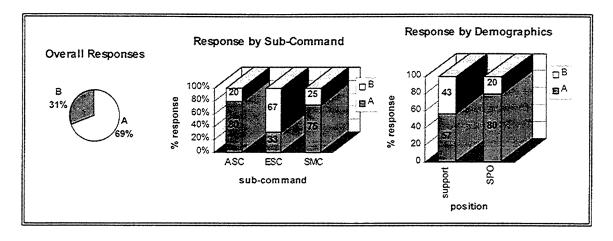


Figure 7. Graphic Response Representation For Question #5c.

ESC seemed to rather strongly disagree with the other two commands in this area. This could be attributed to a few factors. As previously indicated, ESC was nearly evenly split as to whether their organization used past performance data as evaluation factors prior to FASA while the other two commands tended to feel more strongly that their organizations did use past performance data. Since the number of respondents at ESC who felt this way was smaller than the other groups, their overall responses were more sensitive to slight changes. Additionally, there was a fairly large disparity between the two. SMC interviewees consisted of the largest percentage of support versus SPO personnel in the three groups and could have contributed to this sizable difference. As previously mentioned, maintaining an even representation between the three subcommands was difficult due to the changing defense procurement environment. This was particularly true at SMC.

Question #6: Did your organization identify in its solicitations, all significant evaluation factors and their relative importance prior to the enactment of FASA?

- a) Yes [93%]
- b) No [7%]
- c) Don't know [0]

Analysis: Responses to this question appeared to be much more conclusive that some of the previous questions. All subjects with the exception of one indicated that their organizations had identified all significant evaluation factors an their relative importance prior to FASA's implementation. The one interviewee that responded otherwise could be grouped under the support personnel demographic variable at SMC. That respondent did indicate through further questioning that his organization does presently utilize that practice as a result of FASA, however. Those that indicate that their organizations did include this information in solicitations were further queried as to whether FASA changed the way that they identified this information.

Question #6c: Did the implementation of FASA change the way your organization identified in its solicitations, all significant evaluation factors and their relative importance?

- a) Yes [57%]
- b) No [36%]
- c) Don't know [7%]

Analysis: Overall, the results from this question do not appear to be very conclusive. However, if you break down the results by sub-command they do appear somewhat more so. As has previously been the case in this research though, there is a disparity in responses between ESC and the other two sub-commands. Refer to Figure 8.

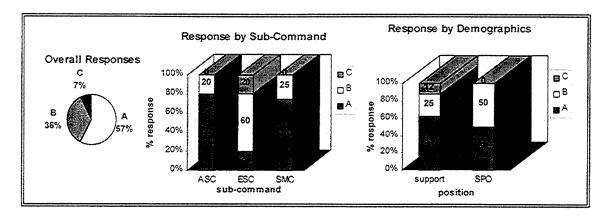


Figure 8. Graphic Response Representation For Question #6c.

One respondent from a support organization at ESC was not certain whether there were any changes in this areas to occur pursuant to FASA, so he chose "don't know."

The next question was meant to get the subjects' overall opinion as to whether FASA changed their organization's contracting process.

Question #7: Overall, would you say that FASA changed your organization's contracting process?

- a) Yes [93%]
- b) No [7%]
- c) Don't know [0]

Analysis: It was interesting to note that a few of the interviewees indicated that the changes to occur as a result of FASA were quite significant while a majority of the subjects thought the changes to be on a smaller scale. Regardless of the scale, all of the respondents, with the exception of one from a support organization at ESC, maintained that FASA did impact their organization's contracting process in one way or another. The respondent that answered "no" to this question indicated that the implementation of FASA was a positive step towards improving federal acquisitions, however her organization's practices were consistent with the Act's provisions prior to its creation.

She expounded further by saying that she believed that this was the case throughout the DOD and that FASA's impact would be greatest in other executive agencies outside the DOD. The responses of the other interviewees seemed to contradict her notions however.

Those respondents that indicated that changes had occurred were further questioned about what they thought to be the most significant change to occur as a result of FASA. The responses included the following:

- increase in debrief content (openness) [57%]
- increased thresholds [14%]
- expedition of debrief (timing) [7%]
- inducement to "commercial off the shelf" [7%]
- changes in organizational structure [7%]
- early industry involvement [7%]

The interviewees were then questioned as to whether they thought that there has been any change in the number of protests occurring since FASA's implementation.

Question #7c: Overall, would you say that award protests have increased or decreased as a result of these changes made in your organizations contracting process?

- a) Increased [14%]
- b) Decreased [50%]
- c) Neither [29%]
- d) Don't Know [7%]

Analysis: While most of the respondents agreed that FASA impacted their organization's contracting process, there was little consensus on the effect of these changes. Figure 9 breaks down the responses by demographic variables and subcommand locations.

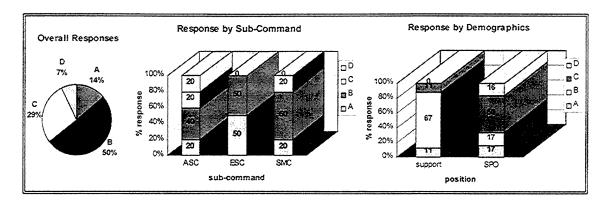


Figure 9. Graphic Response Representation For Question #7c.

As illustrated by Figure 9, there does not appear to be much of a consensus at any level of this analysis. The only similarity between the demographic responses appears to be that both groups agree that protests have not increased as a result of FASA. ESC personnel seem to be evenly split as to whether protests have increased. Those that believed that protests have increased offered use of past performance as an evaluation factor and desperate contractors wanting "their piece of the shrinking defense procurement pie" as the most common reasons for the increases at 50% each. Those that believed protests have decreased, unanimously agreed that the increase in information provided during debriefs was the primary factor in the reductions. Given this consensus, the next question was intended to get PCOs' opinions on whether this increase in information might have resulted in an improvement in the quality of contractor proposals.

Question #8: Do you feel that the quality of proposals submitted have changed in regards to completeness and responsiveness to the solicitation since the implementation of FASA?

- a) Improved [33%]
- b) Degraded [7%]
- c) No change [60%]
- d) Don't know [0]

Analysis: The responses to this question were surprising to the author. Common sense seems to imply that if contractors are getting more information about their weaknesses during debriefs that they might use this information to create better proposals in the future. However, the responses to this question seem to indicate otherwise. While a small percentage feel that proposals have improved, a slight majority feel that there has been no change.

Figure 10 illustrates that most respondents in ESC and ASC felt that there has been no change in the quality of proposals, however SMC was somewhat undecided with "improvement" receiving the largest representation at 40%. "No change" also received a slight majority across both demographic variables. Those that did indicate that their has been an improvement responded unanimously that the primary contributing factor to this phenomenon has been the increase in information provided at debriefs. The sole interviewee that felt that the quality of proposals have degraded attributed this phenomenon to Government and contractor attitudes. He said that the Government is too accommodating in certain areas and contractors tend to rely on this generosity.

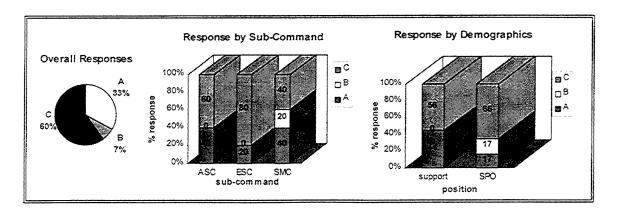


Figure 10. Graphic Response Representation For Question #8.

The next section discusses the analysis of the archival data that constitutes the second phase of this study.

# **Archival Analysis**

As discussed in chapter III, the second phase of this study consists of a statistical analysis of protest data by fiscal year within ASC. The protest data consists of the number of protests received within ASC each fiscal year as a percentage of the total contract awards of \$3 million or greater for the same fiscal year. The number of contract awards meeting the above criteria for each year was gathered from AFMC's Automated Management Information System (AMIS) office at Wright-Patterson Air Force Base in Ohio. The number of protests received on those awards was obtained through the Air Force Contract Law Center, which is also located at Wright-Patterson Air Force Base. The following table depicts the data that was obtained and will be used as the focus of the of the second phase of this study.

Table 3. ASC Protest Data.

	Fiscal Year								
	93 94 95 96								
# of Competitive Awards >= \$3M	35	43	62	83	52				
# of Protests	30	24	43	38	9				
Protests as Percentage of Awards	0.857	0.558	0.694	0.458	0.173				

As mentioned in chapter III, the preferred method to use in analyzing this data was a parametric statistical method. However, the data being used could not satisfy the assumptions of such a test.

The Chi-square test has assumptions to meet as well although they are much less stringent than those required for its parametric counterparts. The first assumption requires that the expected frequency for each cell should be at least five. The expected value for each cell is computed using the following formula:

$$E_{ij} = \sum_{i} n_{ij} \left[ \frac{\sum_{j} n_{ij}}{N} \right]$$

Using the formula above, we arrive at the following expected frequencies for each cell outlined in Table 4.

Table 4. Expected Cell Frequencies.

Fiscal Year	Protest	No Protest
93	18.327	16.672
94	22.516	
95	32.465	
96	43.462	39.538
97	27.229	24.771
Period	Protest	No Protest
Pre-FASA	36.99	41.014
Post-FASA	64.014	70.99

The top cells include the expected cell frequencies for the first analysis between each of the years while the lower half contains those for the pre- post-FASA comparison. According to the results, the data meets the assumption that the expected frequency for each cell should be at least five. The next assumption requires that the scale of measurement be at least nominal. The data exceeds this requirement since the scale of measurement is ratio and the measurements enable the determination of how many times

as much of the measured characteristic is possessed by one unit of the sample than another.

The next assumption requires that the samples are independent. Samples are independent if the assumption that "b" has occurred does not alter the probability that "a" occurs [McClave and Benson, 1994: 160]. In this instance, the occurrence of one protest does not necessarily alter the probability that another award will be protested.

Additionally, an award that was protested one year, does not necessarily change the probability that other awards will be protested in any of the following years.

The final assumption requires that the data in each sample is frequency in form and categorized into mutually exclusive and exhaustive categories. Since the data consists of the number of protests as a percentage of the number of contract awards and either the contract is protested or not protested, this assumption appears to have been met as well.

Given that the assumptions have been met, it appears that the Chi-square test will be the most appropriate for this data analysis. In order to use this test, the data is compiled and formatted into table form. The following tables depict the form that will be used for both analyses.

Table 5. Contingency Table For First Analysis.

Fiscal Year	Protest	No Protest	Totals
93	30	5	35
94	24	19	43
95	43	19	62
96	38	45	83
97	9	43	52
Totals	144	131	275

Table 6. Contingency Table For Second Analysis.

Period	Protest	No Protest	Totals
Pre-FASA	54	24	78
Post-FASA	47	88	135
Totals	101	112	213

Table 5 depicts the data for the first analysis which is intended to discern whether there is any difference between the individual years. Table 6 depicts the data for the second analysis which is intended to test the hypothesis that there has been a change in the frequency in protests between the pre- and post-FASA periods. The hypotheses being tested by the first analysis, along with the tests statistic and rejection region are as follows:

H<sub>o</sub>: 
$$p_1 = p_2 = p_3 = p_4 = p_5$$
  
H<sub>a</sub>:  $p_1 \neq p_2 \neq p_3 \neq p_4 \neq p_5$ 

Test statistic: 
$$\chi^2 = \sum_{i,j} \left[ \frac{\left( n_{ij} - E_{ij} \right)^2}{E_{ij}} \right]$$

Rejection region: Reject Ho if  $X^2$  exceeds 9.348 (from a Chisquare distribution table) based on a significance of .05 and (r-1)(c-1)=4 degrees of freedom.

The results of this analysis revealed that the  $X^2$  of 50.05 exceeded 9.348, therefore we reject the null hypothesis in this analysis. By rejecting the null hypothesis, we can conclude that at least one of the years' protests differs from the others'. This conclusion does not answer the question whether there are differences between the pre- and post-FASA periods, however. Since there is an apparent difference in the protests, we now

split the data into two categories consisting of pre- and post-FASA to test for impacts of the Act on protest frequency. The second analysis is very similar to the first, except we will be looking at whether the two period, pre-FASA (fiscal years 93-94) and post-FASA (fiscal years 96-97) are different. The hypotheses being tested by the second analysis, along with the tests statistic and rejection region are as follows:

$$H_0: p_1 = p_2$$
  
 $H_a: p_1 \neq p_2$ 

Test statistic: 
$$\chi^2 = \sum_{i,j} \left[ \frac{\left( n_{ij} - E_{ij} \right)^2}{E_{ij}} \right]$$

Rejection region: Reject Ho if  $X^2$  exceeds 3.841 (from a Chisquare distribution table) based on a significance of .05 and (r-1)(c-1)=1 degrees of freedom.

The results of this analysis revealed that the  $X^2$  of 23.48 exceeded 3.841, therefore we reject the null hypothesis in this analysis as well. Rejecting the null hypothesis in this instance indicates that there is a statistically significant difference in the protest frequency between the pre- and post-FASA periods.

## Summary

In the analysis of this data, there were some surprising outcomes. Some of the responses from the interview questions exceeded the decision criteria, indicating that certain areas of source selection practices have changed. These results are somewhat contradictory to what was implied from the research conducted during this study's literature review. Additionally, the statistical analysis of the archival data revealed that

there has been a change in protest frequency, which is also contradictory to the insinuations of the literature review findings. The next chapter discusses the findings of the analyses in this chapter and their implications on the acquisition function of the Air Force.

# V. Conclusions and Recommendations

#### General

In the conclusion, a brief recapitulation of the findings detailed in chapter IV will be presented; also conclusions will be drawn as to the import of those findings. Finally, brief suggestions will be made as to areas for further research that were suggested by the findings of this thesis.

#### Restatement of Objectives

This research was intended to provide insight as to the effectiveness of Acquisition Reform, specifically the Federal Acquisition Streamlining Act of 1994, at reducing the frequency of bid protests. By analyzing the effectiveness of the Act, the goal of this study was to discern whether FASA has actually changed contracting practices and if so, what impact these changes may have had on protest frequency. As previously discussed in chapter II, evidence uncovered during the literature review seemed to indicate that FASA had negligible affect on actual contracting practices and consequently has neither increased nor decreased protest frequency.

# **Impact on Contracting Practices**

As indicated in chapter III, a case study methodology employing structured telephone interviews was used in determining whether any changes in contracting practices has occurred as a result of FASA. The results and conclusions of those interviews follow and are summarized in Table 7.

Table 7. Decision Matrix For Interview Responses. One or more of any question marked with an asterisk that receives >= 80% of the responses will indicate that FASA has changed actual contracting practices within AFMC.

را کل Question	Response	CONCLUSION	Decision	AFMC %	ASC %	ESC %	SMC %	Support	sPo
1,2	Α	FASA resulted in the practice of providing an increased amount of information to unsuccessful offerors during post-award debriefs	*	93	100	80	100	89	100
1a,2a	А	FASA did not result in the practice of providing an increased amount of information to unsuccessful offerors during post-award debriefs		7	0	20	0	0	0
3a	Α	FASA resulted in the practice of providing an increased amount of information to unsuccessful offerors during post-award debriefs (ranking)	*	33	60	20	20	33	ಜ
		FASA did not result in the practice of providing an increased amount of information to unsuccessful offerors during post-award debriefs (ranking)		60	40	80	60	56	67
4		FASA changed the response time to requests by unsuccessful offerors for post-award debriefs	*	67	80	60	60	78	50
4a	ĄВ	FASA did not change the response time to requests by unsuccessful offerors for post-award debriefs		33	20	40	40	22	50
5a,6a	Α	FASA changed evaluation factor practices	*	13-7	0	20-0	20	11	17
	В	FASA has not changed evaluation factor practices		7,0	0	40-0	0	11	0
		Insufficient evidence exists to make determination		80-93	100	20-100	80	78	83
5c,6c	Α	FASA changed evaluation factor practices	*	67-60	80	40-20	80	80	83
		FASA did not change evaluation factor practices		33-33	20	60-60	20	20	17
	С	Insufficient evidence exists to make determination		0-7	0	0-20	0	0	0
7	Α	FASA changed contracting practices	*	93	100	80	100	89	100
		FASA has not changed contracting practices		7	0	20	0	11	0
	С	Insufficient evidence exists to make determination		0	0	0	0	0	0

Questions 1 and 2 dealt with changing the content of post-award debriefs. As indicated by Table 7, the responses invariably indicated that organizations throughout the command have increased the amount of information provided to unsuccessful offerors during post-award debriefs as a result of FASA's implementation. The one individual who did not agree maintained that his organization had always provided adequate information during debriefs and that the content of these debriefs met or exceeded the

level called for in the provisions of FASA. Of all the questions, these two were among the ones that had the highest degree of agreement across all categories.

The responses received from question 3 were quite different however. Question 3 dealt with providing ranking information during post-award debriefs and the responses received were not overly conclusive in either direction. Most of the interviewees seemed to indicate that not a lot of change has occurred in this area, and based on the decision matrix above, it seems that FASA did impact this arena of the contracting process.

A slight majority of the respondents indicated that their organizations have expedited responses to requests for debriefs to be in concurrence with the Act. However, according to the decision criteria in the matrix, only one sub-command indicated with a sufficient proportion that practices have actually changed. This is not necessarily bad news though since those that disagreed that any change has occurred unanimously maintained that their existing policies met or surpassed the response timing called for in the Act.

Questions 5 and 6 focused on changes in evaluation factor practices. The results indicate with sufficient proportion across both demographic groups and all sub-commands with the exception of one that there has been a change in this area. The one sub-command that maintained that no change has occurred however, disagreed in such a large proportion with the other groups as to drop the overall AFMC level below the required 80% level. Consequently, we cannot conclude that FASA changed evaluation factor practices for the purposes of this study. The subjects in ESC which disagreed with the others on this area indicated that the provisions in FASA pertaining to use of past

performance as evaluation factors and identification of significant evaluation factors and their relative importance in solicitations was common practice within their organizations prior to the Act's implementation. They also went on to say that FASA did not alter their practices in this area as well.

The last set of questions in the decision matrix included an open-ended question to gain the interviewees insight's into the impact of FASA. The respondents indicated in sufficient proportions that FASA has changed contracting practices in their organizations. The magnitude of the postulated changes varied across the respondents from relatively small to consequential, with a majority agreeing the most significant area of change to be in debrief content.

An additional set of questions not included in the matrix was intended to gain PCO's insights into any quality changes in offerors' proposals since FASA. Evidence uncovered during the literature review suggested that an important and significant impact of FASA would occur in the area of debrief content. This led the author to hypothesize that future proposals could potentially improve if unsuccessful offerors are truly getting more information regarding their weaknesses in competitions. The results of this query were not conclusive as a slight majority felt that there had been no change in proposal quality with the implementation of FASA. Responses to this question were used to address proposition #3 and the results indicate that FASA has not impacted post-award protest frequency within the United States Air Force. Interestingly, one respondent felt that proposal quality has degraded as a result of the Act because contractors have become overly reliant on the "openness" and "generosity" of the Government in

providing information to offerors and early industry involvement. As a caveat to this implication that contractors are becoming lazy, the author would like to add that this was not the impression given by the other respondents.

Based on the findings of these interviews, the author concludes that, in answer to Proposition #1, FASA impacted Air Force source selection procedures as they relate to content and administration of post-award debriefs. This impact amounts to an increase in the content provided to unsuccessful offerors during post-award debriefs. More specifically, unsuccessful offerors appear to be receiving more information regarding reasons for their exclusion and weaknesses in the proposals they submitted. Additionally, contracting procedures overall have been impacted by FASA. While there is some question as to the magnitude of these changes, it is apparent that procedures have changed nonetheless and these changes could potentially influence the frequency of protests.

While it appears that an answer to the first proposition has been found, there are some interesting additional observations in the responses when they are broken down demographically. Referring to Figure 12, there appears to be somewhat of a disparity in the way ESC responded in comparison to the other two commands, particularly on the critical questions marked with an asterisk. The respondents from ESC seemed to agree with the other two commands on all of the critical questions with the exception of one, but to a lessor degree. Those that disagreed with the others indicated that the mandates of FASA were already being practiced prior to the Act's implementation. They seemed to suggest that their organization was on the leading edge of acquisition reform and was

proactive in improving their procedures. This phenomena was emphasized by the responses to questions 5c and 6c. When broken down demographically, all groups with the exception of ESC, felt with sufficient proportion of responses (80%) that there has been changes in evaluation factor practices at their organizations as a result of FASA. ESC on the other hand was in strong disagreement on this issue, with agreement receiving only 40% and 20% on each of the questions. Once again, their reasoning for disagreement was that their organization was more progressive. Given this, it is interesting to note that most of those at ESC that did feel that FASA had an impact on ESC's contracting procedures felt that the biggest change occurred in providing more thorough debriefs. This would seem to contradict the opinions of others in that same group. Another interesting outcome was that although ESC appeared to have the largest contingent with the opinion that nothing had changed, they also had the largest contingent with the opinion that protests have increased. Adding to this contradiction was the fact that none of the ESC respondents felt that there has been no change in protest frequency as opposed to the other commands which did have a few with that opinion. In other words, some at ESC appear to be asserting that procedures have not changed since their organizations are progressive, but protests have changed. It would be interesting to learn why they feel there has been a change in protests despite the progressive contracting methods they employ.

The only large disparity in responses when broken down by function appeared to be in question 7c. A majority of support personnel felt that protests have decreased, while their counterparts in the SPOs felt that there has been no change. They were

somewhat in agreement that procedures have changed as a result of FASA, however they did not see eye-to-eye on the impact on protests. It was encouraging to note however that the number of respondents in both groups that felt that protests have increased was relatively small and comparable.

The question as to whether there has been any change in protest frequency was addressed through statistical analysis of archival data and is answered in the following section.

#### **Protest Frequency**

The Chi-square tests conducted in chapter IV resulted in the rejection of the null hypothesis in both cases. As a result, there is sufficient evidence to suggest that there has been a difference in protest frequency between the pre- and post-FASA periods. The analysis conducted between each of the years confirmed that the samples are not drawn from identical populations. Although there was a slight spike in protest frequency in 1996, the number of protests as of June 30<sup>th</sup> of fiscal year 1997 are quite low as compared to all previous years and overall, protests have decreased between the pre- and post-FASA periods. The next section summarizes the results and derive conclusions as to their importance.

#### **Conclusions**

The findings of the analyses have already been presented however in order to draw any conclusions it is necessary to refer back to the design of the study. This study was designed as a two phase study, with the overall objective of determining whether FASA has impacted award protest frequency within the United Stated Air Force. The

first phase consisted of structured interviews to determine what, if any, changes in contracting source selection practices have occurred as a result of FASA. The results of this phase indicated that practices have changed within AFMC, particularly in the area of post-award debriefs to unsuccessful offers. As a result of these findings we are able to reject the hypothesis formed by proposition #1 that FASA has not impacted the United States Air Force's source selection processes in a manner that would significantly affect post-award protest frequency. These findings by themselves are quite interesting however further analyses had to be conducted in the second phase to determine whether these changes resulted in changes in the frequency of award protests.

The second phase was intended to analyze protest frequency within ASC prior to, and after FASA's implementation. The results of this analyses indicated that protest frequency has changed between the two periods with what appears to be an overall reduction in frequency. Figure 11 delineates how, with these findings, we can draw conclusions as to their meaning.

The shaded areas indicate the course the study has taken as a result of the findings. Since it was determined that FASA has changed contracting practices and there has been an overall reduction in protests, we are able to reject the hypothesis formed by proposition #2 that FASA has not impacted post-award protest frequency within the United States Air Force.

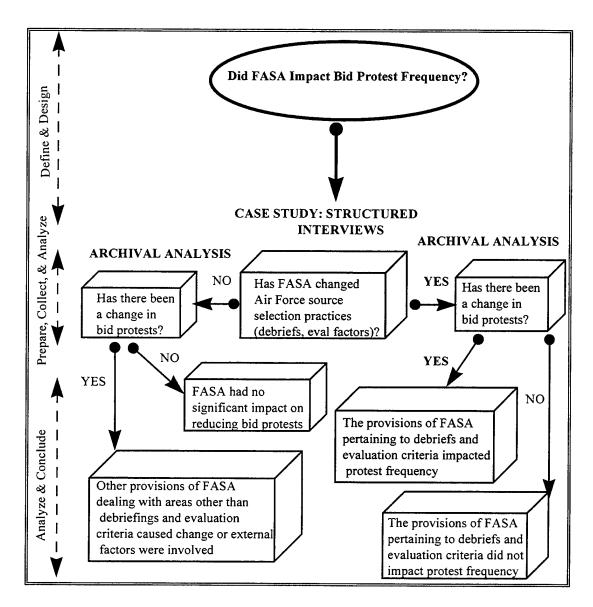


Figure 11. Study Design.

While the data collected was limited to AFMC for the surveys and ASC for the protest numbers, the findings should be representative of the Air Force as a whole since AFMC manages approximately 52% of the annual United States Air Force budget and represents the largest buying organization in that service. Additionally, all agencies within that branch are governed by the Federal Acquisition Regulation (FAR).

#### **Implications**

As a result of the methods employed in this research, it appears that FASA resulted in a decrease in the frequency of award protests. What does this mean? It means that Government efforts at reducing protests appear to be working. The degree of their successfulness is questionable however.

As indicated from the findings of the interviews and literature review, there appears to be some end-users in the field with unpopular opinions of acquisition reform and their affects in general. This warrants the question as to whether their claims have merit or are they merely resisting change. After all, many of the acquisition reform efforts prescribe paradigm shifts from structured procedures and centralized decisionmaking to decentralized decision-making and employing the principles of creativity and empowerment in problem solving. Those with a bureaucratic mindset might be locked into one management style and be unwilling to submit to such principles. It is possible, however that those with negative attitudes towards such initiatives might have sharper insight into the impacts and those in majority are caught up in a euphoria that change equates to progress and improvement. If on the other hand, the opposite is true and the "nay-sayers" are merely resisting change, could their attitudes be contributing to a negative inertia towards reform and improvement? If this were the case, it is conceivable that acquisition reform could be more successful in their goals of streamlining acquisitions, improving competition, and reducing protests if these opinions could be swayed or reduced through training or education. This would be particularly true of efforts such as FASA which appear to be working despite some negative influence.

Despite whether the negative opinions have merit, they do exist and must not be ignored, for their impact could be notable. This leads to the question of what could be contributing to some of the negative attitudes towards acquisition reform? It is possible that it is just a mind-set as previously mentioned. On the other hand, perhaps some are risk averse and do not feel comfortable with the reduction in controls and set procedures, and increased "openness" called for by FASA. Those that view acquisition reform unfavorably may perceive there to be "work-arounds" to those procedures that they disagree with or feel uncomfortable abiding by, which negates any necessity to take acquisition reform seriously.

Some may assert that reform is used as a "hollow" effort by politicians to grab headlines. When this occurs, everyone jumps on the bandwagon and embraces the new buzzwords and concepts to appear progressive and forward-thinking. According to those with these opinions, once the novelty of the effort fades, its back to business as usual and everyone forgets all about it. Another related perception is that the time lag in implementing acquisition reform efforts is excessive and is caused by "red-tape." In the words of another anonymous contracting officer, "we hear a lot of hooray, but don't see the parade." Once the changes reach the end-user level, they are watered-down and fall short of their expectations. This was echoed in the Literature Review, were it was learned that FASA fell short of expectations and could have went a lot further in the eyes of a few. If this is true, perhaps the Government needs to concentrate on streamlining its policy implementation as well as its procedures.

Another opinion encountered was the lack of user involvement in formulating new acquisition efforts. An example was given by one contracting officer, who wished to remain anonymous, was the Air Force's acquisition reform efforts known as the "Lightening Bolts." One of the provisions of this initiative was the creation of a SPO manpower model which established limitations on the number of personnel within those organizations. According to the unnamed contracting officer, the numbers seemed very arbitrary and the creators (SAF/AQ) should have gotten inputs from those effected in order to better understand the implications. It makes perfect sense to involve the endusers in the creation of new procedures and policies and if it is not being done, the effectiveness of these initiatives could definitely be hampered. If end-user involvement is being practiced, it might be beneficial to examine why there is still a perception it is not.

In addition to the finding that FASA changed contracting procedures, this study also revealed that protest frequency has also decreased. While it is inappropriate to imply a causal relationship exists between the implementation of FASA and the reduction in protest frequency, the findings of this study do suggest that there is a degree of correlation between the two. It is possible that other factors contributed to the decline in protests as well, however.

An attempt was made to minimize the influence of other factors on protest frequency in this study however complete isolation was impossible for obvious reasons.

The impact of reductions in Government procurements and the changes in the types of procurements and systems being acquired could still provide varying degree of influence.

Among the defense firms, there is a trend that could diminish the impact of not winning a Government source selection. As defense spending shrinks, an increasing number of firms that relied solely on DOD contracts are turning to the civilian marketplace. Some of these firms either get out of the defense business altogether or supplement that sector with commercial products directed at other markets. This trend essentially reduces the impact of not winning a Government contract since these companies are no longer completely reliant on that market. Similarly, the recent trend towards mergers and teaming arrangements among the large defense firms such as Boeing-McDonnell Douglas, Lockheed-Martin and Northrup-Grumman could reduce the impact of not winning a Government contract as well. This shrinking effect on the defense industrial base could conceivably make it more likely that a company could simultaneously be a prime contractor involved in a competition and have subsidiaries as subcontractors with other prime contractors bidding on the same contract. Even if the company is not awarded the contract as the prime contractor, the impact of losing is diminished because they are still getting a piece of the action through one of their subsidiaries. As the impact of losing a competition diminishes, it is conceivable that the attractiveness of protesting would diminish as well.

Another interesting notion is that perhaps the appeal of protesting has diminished as a result of some of the changes in Government policies, such as the use of contractor past performance as evaluation factors. Contractors may misunderstand the ramifications of what type of information is considered under past performance and believe that

protesting could give the impression that they are difficult to work with and harm their chances of winning future contracts.

As previously mentioned, the findings of this study should be acceptable for generalization to the Air Force as a whole. However, insights gained through the course of this study put the degree of generalization in suspect. While FASA appeared to have made notable changes in contracting practices overall, perhaps the most significant impact occurred in operational contracting at the individual unit level. The provisions of FASA made significant modifications to small procurement procedures by establishing preferences for commercial off the shelf items and the use of "micro-purchase" procedures for procurements less than \$2500. The scope of this study was limited to the systems arena of Air Force contracting and based on the findings, the author believes that the findings in a similar study of operational contracting would yield the same conclusions with greater impact.

It feels good to say that things are getting better, however it is difficult to do so with absolute certainty. While the conclusions of this study are somewhat profound, new questions arise and it becomes necessary to address them if we desire to advance our knowledge of such actions and their impacts. Additionally, there are limitations to the findings of this study, which will be addressed next.

#### Limitations

This research was somewhat bounded by the element of time and availability of data. The findings of this research might have been more robust had protest data prior to 1993 been available. This would have helped to isolate the affects of previous acquisition

reform efforts from the impacts of FASA and minimize the effects of extreme fluctuations in protest frequency. Agencies are not required to track this data by contract amount and the researcher was very fortunate that one agency in ASC did so anyway.

The time limitation also applies because the Act has been in affect for a relatively short time. It would be interesting to conduct a follow-on study to determine if the affects of FASA change after it has been in effect for a longer period. As time passes, it becomes more admissible that the end-users of the legislation become more proficient with the mandates and procedures of the Act, or perhaps some latent flaws or defects will surface as a function of experience with the provisions. To adequately ascertain the impact of the Act, these issues will have to be addressed as they coalesce.

One other limitation was the possible impact other events or acquisition reform efforts may have had on protest frequency. It would be nearly impossible to completely isolate these effects, however the findings from this research seem strong enough to indicate that FASA may have reduced protests to some degree. Conducting the same type of analysis in the future would be convoluted by the implementation of FARA, which occurred shortly after FASA and was considered to be a refinement of FASA's provisions. Additionally, it is difficult to attribute the reductions in protests to contractors being more satisfied with procedures. There are other factors that could potentially influence such decisions to protest, such as risk analysis, or the down-sizing of the defense industrial base. These issues warrant further investigation as well to isolate the impacts of acquisition reform.

# **Recommendations For Further Study**

During the course of this study, several new questions were raised. Some recommendations for further study are as follows:

- Conduct similar interviews with industry to gain their perceptions of the effectiveness of FASA and acquisition reform in general at making Government procurements more appealing. The findings of this study suggests that protests have decreased since FASA's implementation. Further research is necessary to discern the impact of other possible external factors which could influence the frequency of award protests. It is possible that factors other than FASA could have influenced this reduction in protests.
- Conduct a similar study to discern the impacts of FARA on contracting
  practices and protest frequency. The findings of this study indicate that FASA
  did impact contracting practices, particularly in the source selection area, and
  it appears that protests may have decreased as a result. It would be interesting
  to study whether FARA had a similar impact.
- Conduct further research on the differences that were encountered in responses between sub-commands. On particular questions on the interview, there was considerable disparity in responses between the three commands. In many of those instances, the respondents indicated that the reason for the disparity was that their organizations were perhaps more progressive and implemented procedures before they were mandated by FASA. Further investigation of these responses could lead to a better understanding of how

- procedures differ between the different commands and how these changes could impact protests.
- Conduct a similar study using other DOD or executive branch agencies. Some
  of the findings from the Literature Review indicated that FASA's impact
  might have been even more significant on some of the other agencies that had
  less structured procurement procedures than that of the Air Force. It would be
  interesting to understand FASA's impact on protest frequency in such
  organizations.
- Conduct a study of the "negative" attitudes towards acquisition reform in an attempt to discover there foundations and merit. It appears that there is an element that views such reform unfavorably and could impede the effectiveness of those efforts. Developing a better understanding of such attitudes could perhaps make future acquisition reform efforts more effective.
- Conduct a study to discern the benefits and drawbacks of current tracking metrics to measure the effectiveness of acquisition reform efforts and suggestions for improvements or additions. As previously mentioned, some of the data that was used in the archival analysis was not required to be maintained, but was very useful in ascertaining FASA's effectiveness.

#### **Summary**

The direct and indirect costs of protests can be substantial to the Government as well as industry. The Government recognizes the negative impact protests have on the procurement process and has enacted several laws and regulations in an effort to reduce

protest frequency and streamline procurement procedures. In conducting this study, the author sought to determine whether one particular initiative, the Federal Acquisition Streamlining Act of 1994, was effective in accomplishing that objective.

The findings of this study suggest that FASA did have an impact on decreasing protests. The degree of impact is questionable, however and there are external factors that could have potentially influenced the protest frequency. Additionally, evidence uncovered during the Literature Review and structured interviews suggests that perhaps the Act could have been more effective if negative connotations towards acquisition reform in general could be reduced.

# Appendix A: Structured Interview Script

- 1) Pursuant to FASA, has your organization increased the amount of information provided to unsuccessful offerors during post-award debriefs regarding reasons why they were excluded from further consideration?
  - a) Yes go to question 2
  - b) No go to question 1a
  - c) Don't know go to question 2
- 1a) Which best describes why you think that the enactment of FASA has not resulted in an increase in the amount of information provided to unsuccessful offerors during post-award debriefs regarding reasons why they were excluded from further consideration?
  - a) This practice was already being used in my organization prior to FASA. go to question 2
  - b) My organization has not yet implemented a policy or regulation pertaining to such provisions. go to question 1b
  - c) I don't know. go to question 1b
  - d) Other. go to question 1b
- 1b) Do you expect your organization to implement FASA provisions into its post-award debrief procedures regarding the inclusion of reasons why unsuccessful offerors were excluded from further consideration?
  - a) Yes go to question 2
  - b) No ask why, then proceed to question 2
  - c) Don't know go to question 2
- 2) Pursuant to FASA, has your organization increased the amount of information provided to unsuccessful offerors during post-award debriefs regarding weaknesses in their proposals?
  - a) Yes go to question 3
  - b) No go to question 2a
  - c) Don't know go to question 3

- 2a) Which best describes why you think that the enactment of FASA has not resulted in an increase in the amount of information provided to unsuccessful offerors during post-award debriefs regarding weaknesses in their proposals?
  - a) My organization provided this information on a level that met or surpassed that called for by FASA prior to its implementation. go to question 3
  - b) My organization has not yet implemented a policy or regulation pertaining to such provisions. go to question 2b
  - c) I don't know. go to question 2b
  - d) Other go to question 2b
- 2b) Do you expect your organization to implement FASA provisions into its procedures to provide unsuccessful offerors with information about weaknesses in their proposals during post-award debriefs?
  - a) Yes go to question 3
  - b) No ask why, then proceed to question 3
  - c) Don't know go to question 3
- 3) Did your organization include the overall ranking of all offerors during post-award debriefs to unsuccessful offerors prior to FASA?
  - a) Yes go to question 4
  - b) No go to question 3a
  - c) Don't know go to question 3a
- 3a) Does your organization now include the overall ranking of all offerors during post-award debriefs to unsuccessful offerors?
  - a) Yes go to question 4
  - b) No go to question 3b
  - c) Don't know go to question 4
- 3b) Which best describes why you think that the enactment of FASA has not resulted in your organization providing the overall ranking of all offerors to unsuccessful offerors during post-award debriefs?
  - a) That provision is not applicable to my organization.
    go to question 3c
  - b) My organization has not yet implemented a policy or regulation pertaining to such provisions. go to question 3c
  - c) Other. go to question 3c
  - d) Don't know go to question 3c

- 3c) Do you expect your organization to implement FASA provisions into its procedures and begin providing the overall ranking of all offerors during post-award debriefs?
  - a) Yes go to question 4
  - b) No ask why, then proceed to question 4
  - c) Don't know go to question 4
- 4) Pursuant to FASA, has your organization changed its response time to debrief requests made by unsuccessful offerors?
  - a) Yes go to question 5
  - b) No go to question 4a
  - c) Don't know go to question 4a
- 4a) Which best describes why you think that the enactment of FASA has not resulted in a change in your organization's response time to debrief requests made by unsuccessful offerors?
  - a) My organization's response time to debrief requests already met or surpassed the response timing called for by FASA.
    go to question 5
  - b) My organization has not yet implemented a policy or regulation pertaining to such provisions. go to question 4b
  - c) I am unfamiliar with the provisions of FASA pertaining to response time to requests for post-award debriefs. - go to question 5
  - d) I am unfamiliar with my organization's policy on response time to requests for debriefs. go to question 5
  - e) Other go to question 4b
- 4b) Do you expect your organization to implement FASA provisions into its procedures and change its response time to debrief requests made by unsuccessful offerors?
  - a) Yes go to question 5
  - b) No ask why, then proceed to question 5
  - c) Don't know go to question 5
- 5) Did your organization include contractor past performance as an evaluation factor prior to the enactment of FASA?
  - a) Yes go to question 5c
  - b) No go to question 5a
  - c) Don't know go to question 5a

- 5a) Does your organization now include contractor past performance as an evaluation factor?
  - a) Yes go to question 6
  - b) No go to question 5b
  - c) Don't know go to question 5b
- 5b) Do you expect your organization to implement FASA provisions into its procedures and start using contractor past performance as an evaluation factor?
  - a) Yes go to question 6
  - b) No ask why, then proceed to question 6
  - c) Don't know go to question 6
- 5c) Did the implementation of FASA change the way your organization used contractor past performance as an evaluation factor?
  - a) Yes go to question 6
  - b) No go to question 6
  - c) Don't know go to question 6
- 6) Did your organization identify in its solicitations, all significant evaluation factors and their relative importance prior to the enactment of FASA?
  - a) Yes go to question 6c
  - b) No go to question 6a
  - c) Don't know go to question 6a
- 6a) Does your organization now identify in its solicitations, all significant evaluation factors and their relative importance?
  - a) Yes go to question 7
  - b) No go to question 6b
  - c) Don't know go to question 6b
- 6b) Do you expect your organization to implement FASA provisions into its procedures and start identifying in its solicitations, all significant evaluation factors and their relative importance?
  - a) Yes go to question 7
  - b) No ask why, then proceed to question 7
  - c) Don't know go to question 7

- 6c) Did the implementation of FASA change the way your organization identified in its solicitations, all significant evaluation factors and their relative importance?
  - a) Yes go to question 7
  - b) No go to question 7
  - c) Don't know go to question 7
- 7) Overall, would you say that FASA changed your organization's contracting process?
  - a) Yes go to question 7a
  - b) No go to question 8
  - c) Don't know go to question 8
- 7a) What would you say is the most significant change? go to question 7c
- 7b) Why don't you believe that FASA significantly changed your organization's contracting process? go to question 8
- 7c) Overall, would you say that award protests have increased or decreased as a result of these changes made in your organizations contracting process?
  - a) Increased go to question 7d
  - b) Decreased go to question 7e
  - c) Neither go to question 8
  - d) Don't Know go to question 8
- 7d) What single change do you feel had the greatest impact on increasing the frequency of award protests?
  - a) Increase in information provided to unsuccessful offerors during post-award debriefs. go to question 8
  - b) Shortened response time to unsuccessful offerors requests for debriefs. go to question 8
  - c) Use of past performance as an evaluation factor. go to question 8
  - d) Other go to question 8
  - e) Don't know go to question 8

- 7e) What single change do you feel had the greatest impact on decreasing the frequency of award protests?
  - a) Increase in information provided to unsuccessful offerors during post-award debriefs. go to question 8
  - b) Use of past performance as an evaluation factor. go to question 8
  - c) Other go to question 8
  - d) Don't know go to question 8
- 8) Do you feel that the quality of proposals submitted have changed in regards to completeness and responsiveness to the solicitation since the implementation of FASA?
  - a) Improved go to question 8a
  - b) Degraded go to question 8b
  - c) No change survey complete
  - c) Don't know survey complete
- 8a) What do you think contributed the most to these improvements in proposals as a result of FASA?
  - a) Increase in information provided to unsuccessful offerors during post-award debriefs. *survey complete*
  - b) Use of past performance as an evaluation factor. *survey complete*
  - c) Other survey complete
  - d) Don't know survey complete
- 8b) What do you think contributed the most to the degrading in proposals as a result of FASA?
  - a) Increase in information provided to unsuccessful offerors during post-award debriefs. *survey complete*
  - b) Use of past performance as an evaluation factor. *survey complete*
  - c) Other survey complete
  - d) Don't know survey complete
  - e) Other survey complete

# **Appendix B: Structured Interview Responses**

Table 8. Overall Responses Within AFMC.

	а	Б	С	d	е
Ql	14 / 93	1 / 7%	0	0	0
Q1a	1 / 100		0 0	0	0
Q1b	0		0 0	0	0
Q2	14 / 93	1 / 7%	0	0	0
Q2a	1 / 100		0 0	0	0
Q2b	0		0 0	0	0
Q3	0	14 / 93	1 / 7%	0	0
Q3a	5 / 33%	9 / 60%	1 / 7%	0	0
Q3b	8 / 89%		0 1 / 11%	0	0
Q3c	0	8 / 89%	1 '	0	0
Q4	10 / 67	5 / 33%	0	0	0
Q4a	5 / 100		0	0	0
Q4b	0		0	0	0
Q5	12 / 80	3 / 20%	0	0	0
Q5a	2 / 67%	1 / 33%	0	0	0
Q5b	0	1 / 100	0	0	0
Q5c	8 / 69%	4 / 31%	0	0	0
Q6	14 / 93	1 / 7%	0	0	0
Q6a	1 / 100		0	0	0
Q6b	0		0	0	0
Q6c	8 / 57%	5 / 36%	1 / 7%	0	0
Q7	14 / 93	1 / 7%	0	0	0
Q7c	2 / 14%	7 / 50%	4 / 29%	1 / 7%	0
Q7d	0		기 / 50%	1 / 50%	0
Q7e	7 / 100		0	0	0
Q8	5 / 33%	1 / 7%	9 / 60%	0	0
Q8a	2 / 40%		0 3 / 60%	0	0
Q8b	0		1 / 100	0	0

Table 9. Responses Within ASC.

	a	þ	С	d	е
Q1	5 / 100	Ó	0	Ó	0
Q1a	0	0	0	0	0
Q1b	0	0	0	0	0
Q2	5 / 100	0	0	0	0
Q2a	0	0	0	0	0
Q2b	0	0	0	0	0
Q3	0	5 / 100	0	0	0
Q3a	3 / 60%	2 / 40%	0	0	0
Q3b	1 / 50%	0	1 / 50%	0	0
Q3c	0	1 / 50%	1 / 50%	0	0
Q4	4 / 80%	1 / 20%	0	0	0
Q4a	1 / 100	0	0	0	0
Q4b	0	0	0	0	0
Q5	5 / 10	0	0	0	0
Q5a	0	0	0	0	0
Q5b	0	0	0	0	0
Q5c	4 / 80%	1 / 20%	0	0	0
Q6	5 / 100	0	0	0	0
Q6a	0	0	0	0	0
Q6b	0	0	0	0	0
Q6c	4 / 80%	1 / 20%	0	0	0
Q7	5 / 100	0	0	0	0
Q7c	_ /	2 / 40%	1 / 20%	1 / 20%	0
Q7d	0	0	1 / 100	0	0
Q7e	2 / 100	0	0	0	0
Q8	2 / 40%	0	3 / 60%	0	0
Q8a	0	0	2 / 100	0	0
Q8Þ	0	0	0	0	0

Table 10. Responses Within ESC.

	a			b			С			d	е
Q1	4	7	80%	1	7	20%	Г		0	0	0
Q1a	1	7	100			0			0	0	0
Q1b			0			0			0	0	0
Q2	4	7	80%	1	/	20%			0	0	0
Q2a	1	7	100			0	Γ		0	0	0
Q2b			0			0			0	0	0
Q3			0	5	7	100			0	0	0
Q3a	1	7	20%	4	7	80%			0	0	Ō
Q3b	4	7	100			0			0	0	0
Q3c			0	4	7	100			0	0	0
Q4	თ	7	60%	2	7	40%			0	0	0
Q4a	2	7	100			0			0	0	0
Q4b			0			0			0	0	0
Q5	თ	/	60%	2	7	40%			0	0	0
Q5a	1	Τ	50%	1	7	50%			0	0	0
Q5b			0	1	/	100			0	0	0
Q5c	1	/	33%	2	/	67%			0	0	0
Q6	5	/	100			0			0	0	0
Q6a			0			0			0	0	0
Q6b	L.	,	0			0			0	0	0
Q6c	1	/	20%	3	_/	60%	1	_/	20%	0	Ö
Q7	4	_/	80%	1	/	20%			0	0	0
Q7c			0	2		50%	2		50%	0	0
Q7d	_		0			0			0	0	0
Q7e	2	/	100			0	Ļ		0	0	0
Q8	1	/	20%			0	4	/	80%	0	0
Q8a			0			0	1	/	100	0	0
Q8b			0			0			0	0	0

Table 11. Responses Within SMC.

	a			b		W- 1000-1-1-1	С			d	е
Q1	5	7	100			0			0	0	0
Q1a			0	Γ		0			0	0	0
Q1b			0			0	Г		0	0	0
Q2	5	7	100			0	Γ		0	0	0
Q2a			0			0			0	0	0
Q2b			0			0			0	0	0
Q3			0	4	7	80%	1	7	20%	0	0
Q3a	1	7	20%	3	7	60%	1	7	20%	0	0
Q3b	3	7	100			0			0	0	0
Q3c			0	3	7	100			0	0	0
Q4	3	/	60%	2	7	40%			0	0	0
Q4a	2	7	100			0	Г		0	0	0
Q4b			0			0			0	0	0
Q5	4	7	80%	1	7	20%			0	0	0
Q5a	1	7	100			0			0	0	0
Q5b			0			0			0	0	0
Q5c	3	7	75%	1	7	25%			0	0	0
Q6	4	7	80%	1	7	20%			0	0	0
Q6a	1	/	100			0			0	0	0
<b>⊙</b> 6Ъ			0			0			0	0	0
Q6c	3	<u>/</u>	75%	1		25%			0	0	0
Q7	5		100			0			0	0	0
Q7c	1	/	20%	3	/	60%	1	/	20%	0	0
Q7d	_		0			0	1		100	0	0
Q7e	3	/	100	_		0	_		0	0	0
Q8	2		40%	1	/	20%	2	/	40%	0	0
Q8a	2		100			0			0	0	0
Q8D			0			0	1	/	100	0	O.

Table 12. Responses By Type of Position, SPO Versus Support.

		a		)		С		d		е	
	Supp	SPO									
Q1	89	100	11	0	0	0	0	0	0	0	
Q1a	11	0	0	0	0	0	0	0	0	0	
Q1b	0	0	0	0	0	0	0	0	0	0	
Q2	89	100	11	0	0	0	0	0	0	0	
Q2a	11	0	0	0	0	0	0	0	0	0	
Q2b	0	0	0	0	0	0	0	0	0	0	
Q3	0	0	89	100	11	0	0	0	0	0	
Q3a	33	33	56	67	11	0	0	0	0	0	
Q3b	44	67	0	0	11	0	0	0	0	0	
Q3c	0	0	44	67	0	0	0	0	0	0	
Q4	78	50	22	50	0	0	0	0	0	0	
Q4a	22	50	0	0	0	0	0	0	0	0	
Q4b	0	0	0	0	0	0	0	0	0	0	
Q5	78	83	22	17	0	0	0	0	0	0	
Q5a	11	17	11	0	0	0	0	0	0	0	
Q5b	11	0	0 .	0	0	0	0	0	0	0	
Q5c	44	67	33		0	0	0	0	0	0	
Q6	89	100	11	0	0	0	0	0	0	0	
Q6a	11	0	0	0	0	0	0	0	0	0	
Q6b	0	0	0	0	0	0	0	0	0	0	
Q6c	56	50	22	50	11	0	0	0	0	0	
Q7	89	100	11	0	0	0	0	0	0	0	
Q7c	11	17	67	17	11	50	0	17	0	0	
Q7d	0	0	0	0	11	0	0	17	0	0	
Q7e	67	17	0	0	0	0	0	0	0	0	
Q8	44	17	0	17	56	67	0	0	0	0	
Q8a	22	0	0	0	22	17	0	0	0	0	
Q8b	0	0	0 ,	0	0	17	0	0	0	0	

# **Bibliography**

- 1. Acquisition Streamlining Institute. <u>FASA, FARA, & ITMRA</u>. Washington: Federal Publications Inc. 1997.
- 2. Linda Barber. Procurement Analyst, United States Air Force Materiel Command, Wright-Patterson Air Force Base OH. Telephone interview. 4 April 1997.
- 3. Brewer, James K. <u>Introductory Statistics for Researchers</u>. 5<sup>th</sup> ed. Tallahassee: Bellwether Press, 1991.
- 4 Cibinic, John and Ralph C. Nash. <u>Administration of Government Contracts</u>. 3<sup>rd</sup> ed. Washington: The George Washington University, August 1995.
- 5. Cibinic, John and Ralph C. Nash. <u>Formation of Government Contracts</u>, 2<sup>nd</sup> ed., Washington: The George Washington University, August 1986.
- 6. Clover, Vernon T. and Howard L. Balseley. <u>Business Research Methods</u>, 3<sup>rd</sup> ed., Columbus: Grid Publishing, 1984.
- 7. Cooper, James W. <u>Post-Award Debriefing of Unsuccessful Offerors Installation Level</u>. MS thesis. Naval Postgraduate School, Monterey CA, June 1995 (AD-A302949).
- 8. Fausti, John J. and Lori M. Lee. "Understanding the New Administrative Bid Protest Process," <u>Contract Management</u>, 10-14 (January 1997).
- 9. Fulghum, David A. "Losers Weigh JPATS Protest," <u>Aviation Week & Space Technology</u>, vol. 143, issue 4: (July 24, 1995).
- 10. Fulghum, David A. "GAO Kills Last JPATS Protest," <u>Aviation Week & Space Technology</u>, vol. 144, issue 7: 60 (Feb 12, 1996).
- 11. ----. "Government Contracts Alert." WWWeb, http://ffhsj.com (14 Jan 97)
- 12. Kidd, Yvonne. "Federal Procurement Reform Initiatives: Cure for a Dysfunctional System or Ill Wind for the Vendor Community," <u>Inform</u>: 26-30 (September 1996).
- 13. Barbara Liptak. Contracting Officer, United States Air Force Aeronautical Systems Command, Wright-Patterson Air Force Base OH. Telephone interview. 2 April 1997.

- 14. Mason, Robert D. Statistical Techniques In Business and Economics. 5<sup>th</sup> ed. Homewood IL: Richard D. Irwin, 1982.
- 15. McClave, James T. and George P. Benson. <u>Statistics for Business and Economics</u>. 6<sup>th</sup> ed. Englewood NJ: Prentice Hall,1994.
- 16. Ott, Lyman. An Introduction to Statistical Methods and Analysis. 3<sup>rd</sup> ed. Boston: PWS-Kent Publishing, 1988.
- 17. Runyon, Richard P. and Audrey Haber. <u>Fundamentals of Behavioral Statistics</u>. Reading MA: Addison-Wesley, 1971.
- 18. U.S. Government. Office of Management and Budget. Office of Federal Procurement Policy. <u>The Federal Acquisition Regulation</u>. Washington: Government Printing Office, 1990.
- 19. VanMatre, Joseph G. and Glenn H. Gilbreath. <u>Statistics for Business and Economics</u>. Dallas: Business Publications, 1980.
- 20. Walsh, Michael J. <u>The Impact of the Competition in Contracting Act of 1984 on the Contract Award Protest Process</u>, MS thesis. Naval Postgraduate School, Monterey CA, June 1987 (AD-A184727).
- 21. Weirs, Ronald M. Introduction to Business Statistics, Orlando, 1991.
- 22. ----. Wright-Patterson: Legacy, San Diego: MARCOA Publishing, 1995.
- 23. Yin, Robert K. <u>Case Study Research: Design and Methods</u>. Thousand Oaks CA: Sage Publications1994.

Vita

Captain Eric Duncan began his military service in 1986 when he enlisted in the

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Storm as a team leader on a tactical air control team. After returning from Saudi, he

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five months later after attending OTS. His first duty assignment at Barksdale AFB

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OIC of Training, J-3 Watch Officer for Operation Provide Promise, and Aircrew

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